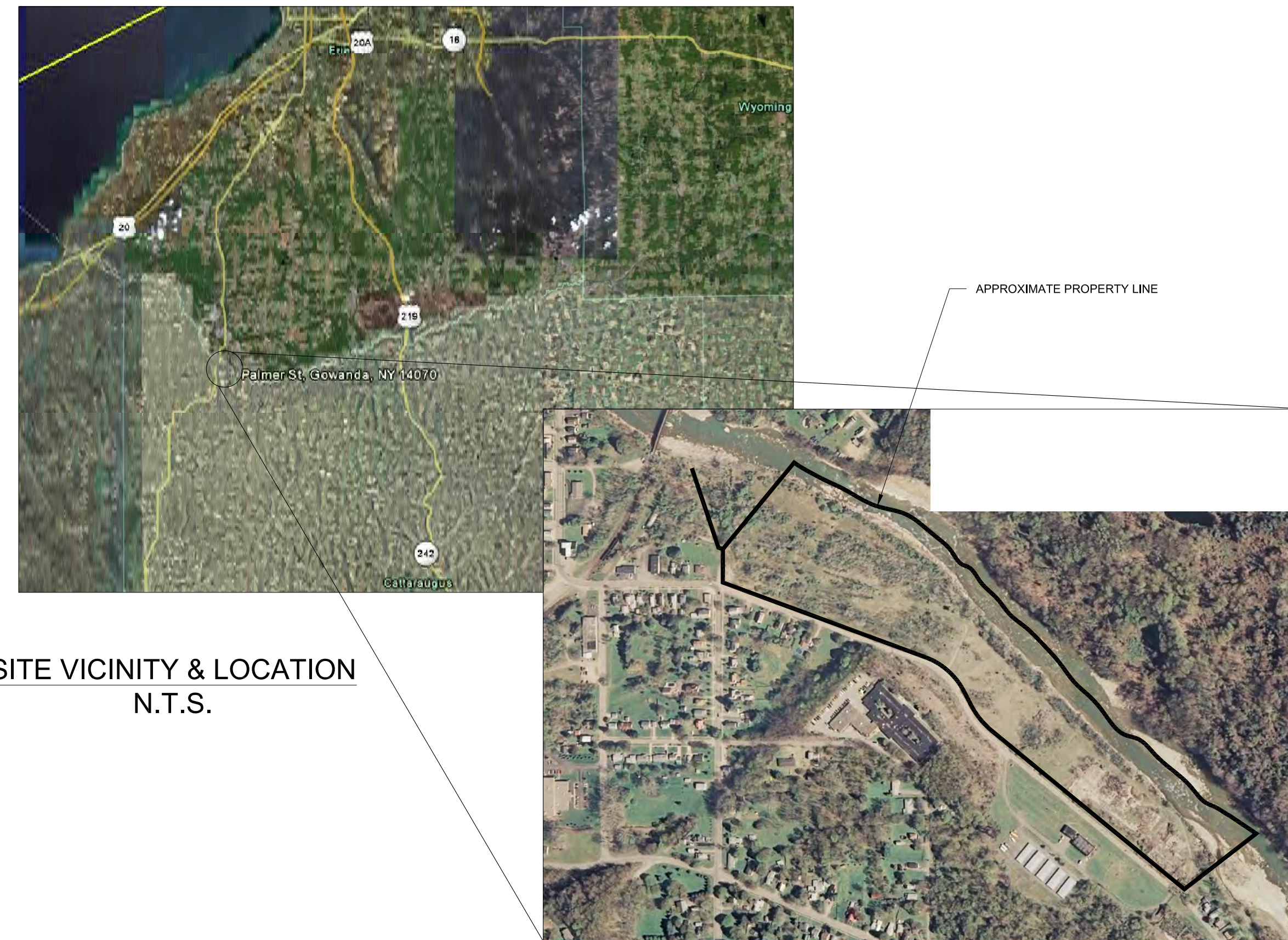


PETER COOPER LANDFILL NPL SITE DESIGN-BUILD REMEDIAL MEASURES CONSTRUCTION

PALMER STREET AND BROADWAY ROAD
GOWANDA, NY 14070



SITE VICINITY & LOCATION
N.T.S.

APPROX. 26 ACRE SITE
N.T.S.

DESIGN-BUILD CONSTRUCTION
PACKAGE PREPARED BY:



DRAWING INDEX	
DRAWING TITLE	SHEET NUMBER
COVER SHEET	T-1
EXISTING SITE PLAN	G-1
EXISTING SITE PLAN	G-2
BANK STABILIZATION AND LEACHATE COLLECTION CONCEPT	G-3
SITE ACCESS, WORK, & CLEARING/GRUBBING LIMITS	G-4
CONSOLIDATED WASTE/FILL SUBGRADE PLAN	G-5
LEACHATE COLLECTION SYSTEM & ANCHOR TRENCH PLAN & PROFILE	G-6
BANK STABILIZATION DETAIL & GEOMEMBRANE PANEL LAYOUT	G-7
LEACHATE DISCHARGE FORCEMAIN PLAN & PROFILE	G-8
LEACHATE DISCHARGE GRAVITY FORCEMAIN PLAN & PROFILE	G-9
FINAL COVER SOIL GRADING PLAN	G-10
ELECTRICAL PLAN AND LAYOUT	E-1
ELECTRICAL PROCESS LOGIC	E-2
DETAILS	D-1

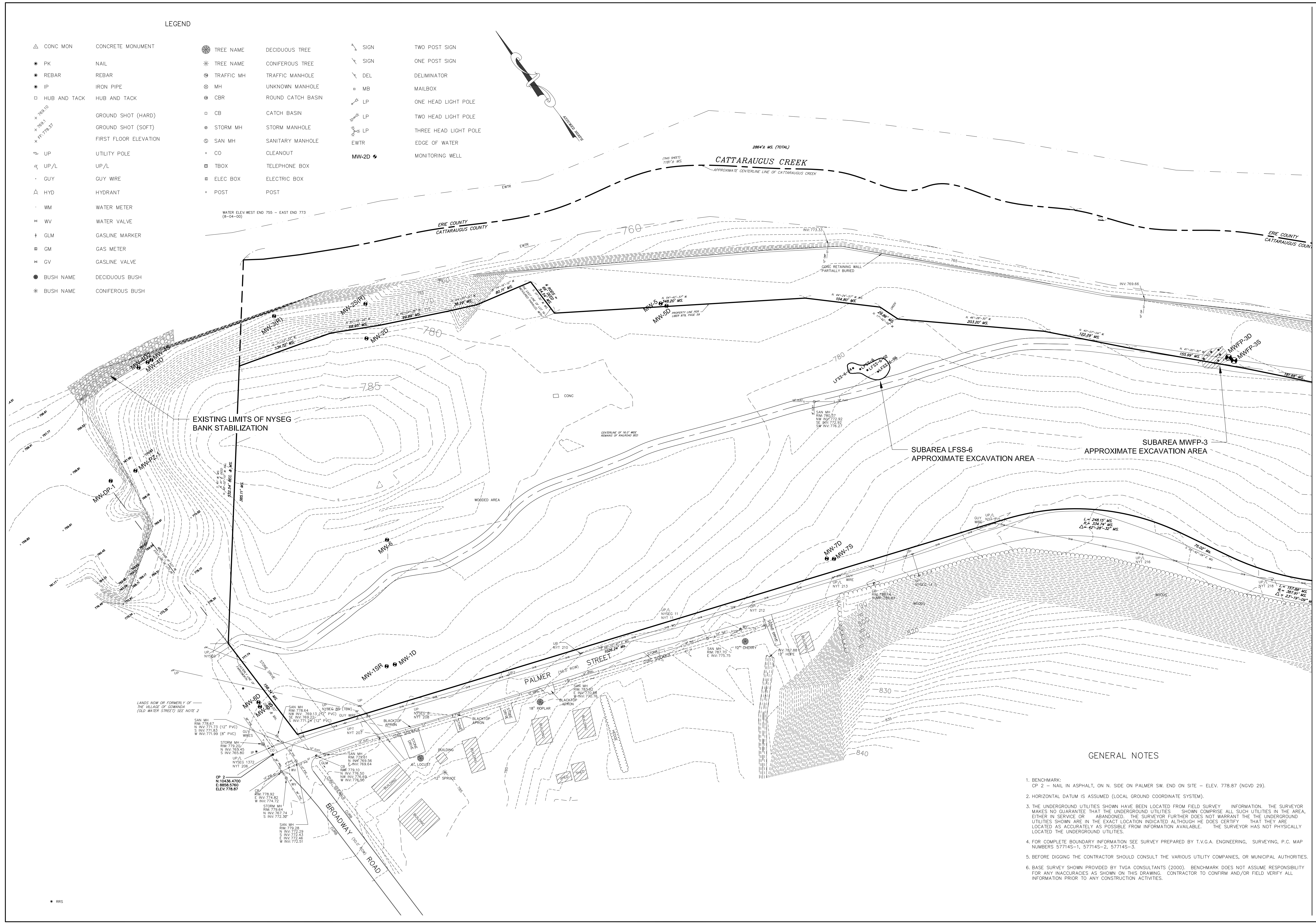
NO.	BY	DATE	REMARKS

SEAL

DRAWN BY: WJM/AJZ	DATE: JULY 2009
CHECKED BY: THF	APPROVED BY:
<small>DISCLAIMER: BENCHMARK EES, PLLC, HEREBY DISCLAIMS THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS THE PROPERTY OF BENCHMARK EES, PLLC. IT IS TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.</small>	

PROJECT COVER SHEET

REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK
PREPARED FOR
SITE RESPONDENTS



LEGEND

△ CONC MON	CONCRETE MONUMENT	● TREE NAME	DECIDUOUS TREE	⚡ SIGN	TWO POST SIGN
● PK	NAIL	* TREE NAME	CONIFEROUS TREE	⚡ SIGN	ONE POST SIGN
● REBAR	REBAR	⊙ TRAFFIC MH	TRAFFIC MANHOLE	⚡ DEL	DELIMITER
● IP	IRON PIPE	⊙ MH	UNKNOWN MANHOLE	⊙ MB	MAILBOX
□ HUB AND TACK	HUB AND TACK	⊙ CBR	ROUND CATCH BASIN	⊙ LP	ONE HEAD LIGHT POLE
+ 789.0	GROUND SHOT (HARD)	□ CB	CATCH BASIN	⊙ LP	TWO HEAD LIGHT POLE
+ 789.1	GROUND SHOT (SOFT)	⊙ STORM MH	STORM MANHOLE	⊙ LP	THREE HEAD LIGHT POLE
+ 773.37	FIRST FLOOR ELEVATION	⊙ SAN MH	SANITARY MANHOLE	EWTR	EDGE OF WATER
⊙ UP	UTILITY POLE	⊙ CO	CLEANOUT	MW-2D	MONITORING WELL
⊙ UP/L	UP/L	⊙ TBOX	TELEPHONE BOX		
· GUY	GUY WIRE	⊙ ELEC BOX	ELECTRIC BOX		
⊙ HYD	HYDRANT	⊙ POST	POST		
· WM	WATER METER				
⊙ WV	WATER VALVE				
⊙ GLM	GASLINE MARKER				
⊙ GM	GAS METER				
⊙ GV	GASLINE VALVE				
● BUSH NAME	DECIDUOUS BUSH				
* BUSH NAME	CONIFEROUS BUSH				

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
 255B HAMBURG TURNPIKE
 SUITE 200A, NEW YORK 14218
 (716) 856-0589
 JOB NO.: 0021-001-900

NO.	BY	DATE	REMARKS

REVISIONS

DRAWN BY: WJMT/AJZ	DATE: JULY 2009
CHECKED BY: THF	APPROVED BY:

EXISTING SITE PLAN
 REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
 GOWANDA, NEW YORK
 PREPARED FOR
 SITE RESPONDENTS

- GENERAL NOTES
- BENCHMARK: CP 2 - NAIL IN ASPHALT, ON N. SIDE OF PALMER SW. END ON SITE - ELEV. 778.87 (NGVD 29).
 - HORIZONTAL DATUM IS ASSUMED (LOCAL GROUND COORDINATE SYSTEM).
 - THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
 - FOR COMPLETE BOUNDARY INFORMATION SEE SURVEY PREPARED BY T.V.G.A. ENGINEERING, SURVEYING, P.C. MAP NUMBERS 57714S-1, 57714S-2, 57714S-3.
 - BEFORE DIGGING THE CONTRACTOR SHOULD CONSULT THE VARIOUS UTILITY COMPANIES, OR MUNICIPAL AUTHORITIES.
 - BASE SURVEY SHOWN PROVIDED BY TVGA CONSULTANTS (2000). BENCHMARK DOES NOT ASSUME RESPONSIBILITY FOR ANY INACCURACIES AS SHOWN ON THIS DRAWING. CONTRACTOR TO CONFIRM AND/OR FIELD VERIFY ALL INFORMATION PRIOR TO ANY CONSTRUCTION ACTIVITIES.

MATCHLINE SEE SHEET G-2

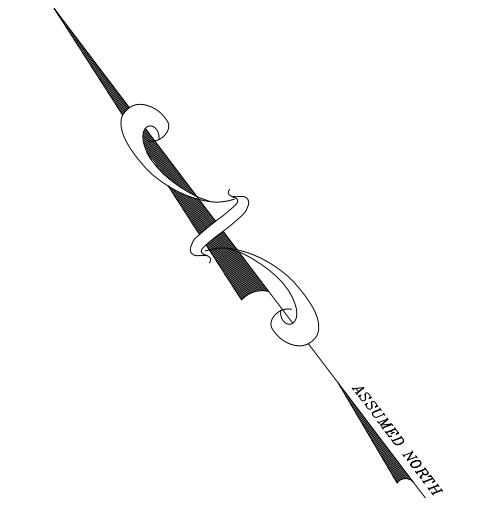
SEAL

LEGEND

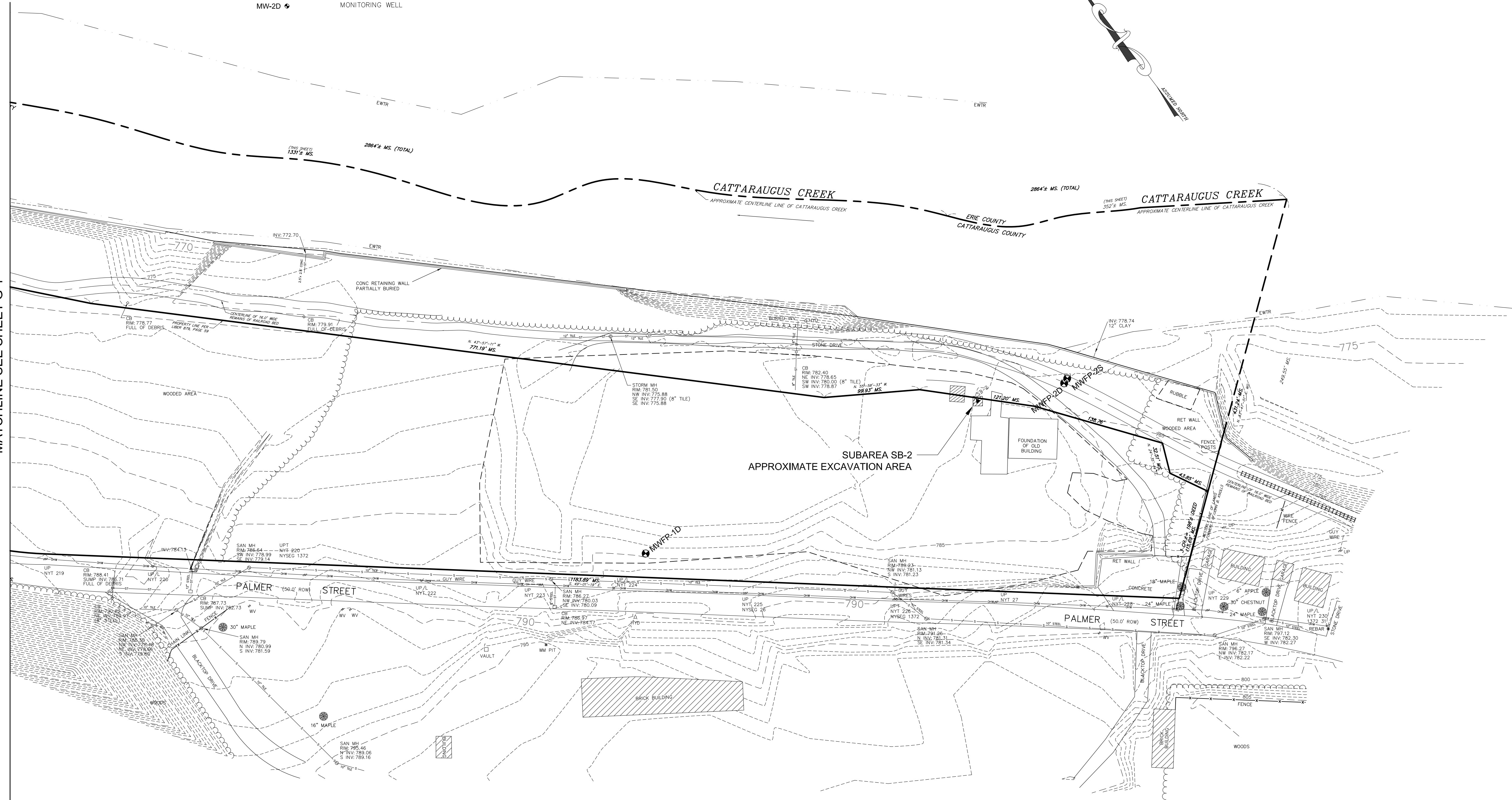
△ CONC MON	CONCRETE MONUMENT	⊙ TREE NAME	DECIDUOUS TREE
● PK	NAIL	* TREE NAME	CONIFEROUS TREE
● REBAR	REBAR	⊙ TRAFFIC MH	TRAFFIC MANHOLE
● IP	IRON PIPE	⊙ MH	UNKNOWN MANHOLE
□ HUB AND TACK	HUB AND TACK	⊙ CBR	ROUND CATCH BASIN
⊙	GROUND SHOT (HARD)	□ CB	CATCH BASIN
⊙	GROUND SHOT (SOFT)	⊙	STORM MH
⊙	FIRST FLOOR ELEVATION	⊙ SAN MH	SANITARY MANHOLE
⊙	UTILITY POLE	⊙ CO	CLEANOUT
⊙	UP/L	⊙ TBOX	TELEPHONE BOX
⊙	GUY WIRE	⊙ ELEC BOX	ELECTRIC BOX
⊙	HYDRANT	⊙ POST	POST
⊙	WM	⊙ SIGN	TWO POST SIGN
⊙	WV	⊙ SIGN	ONE POST SIGN
⊙	GLM	⊙ DEL	DELIMINATOR
⊙	GM	⊙ MB	MAILBOX
⊙	GV	⊙ LP	ONE HEAD LIGHT POLE
●	BUSH NAME	⊙ LP	TWO HEAD LIGHT POLE
*	BUSH NAME	⊙ LP	THREE HEAD LIGHT POLE
		EWTR	EDGE OF WATER
		MW-2D	MONITORING WELL

GENERAL NOTES

- BENCHMARK:
CP 2 - NAIL IN ASPHALT, ON N. SIDE ON PALMER SW. END ON SITE - ELEV. 778.87 (NGVD 29).
- HORIZONTAL DATUM IS ASSUMED (LOCAL GROUND COORDINATE SYSTEM).
- THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
- FOR COMPLETE BOUNDARY INFORMATION SEE SURVEY PREPARED BY T.V.G.A. ENGINEERING, SURVEYING, P.C. MAP NUMBERS 57714S-1, 57714S-2, 57714S-3.
- BEFORE DIGGING THE CONTRACTOR SHOULD CONSULT THE VARIOUS UTILITY COMPANIES, OR MUNICIPAL AUTHORITIES.
- BASE SURVEY SHOWN PROVIDED BY TVGA CONSULTANTS (2000). BENCHMARK DOES NOT ASSUME RESPONSIBILITY FOR ANY INACCURACIES AS SHOWN ON THIS DRAWING. CONTRACTOR TO CONFIRM AND/OR FIELD VERIFY ALL INFORMATION PRIOR TO ANY CONSTRUCTION ACTIVITIES.



MATCHLINE SEE SHEET G-1



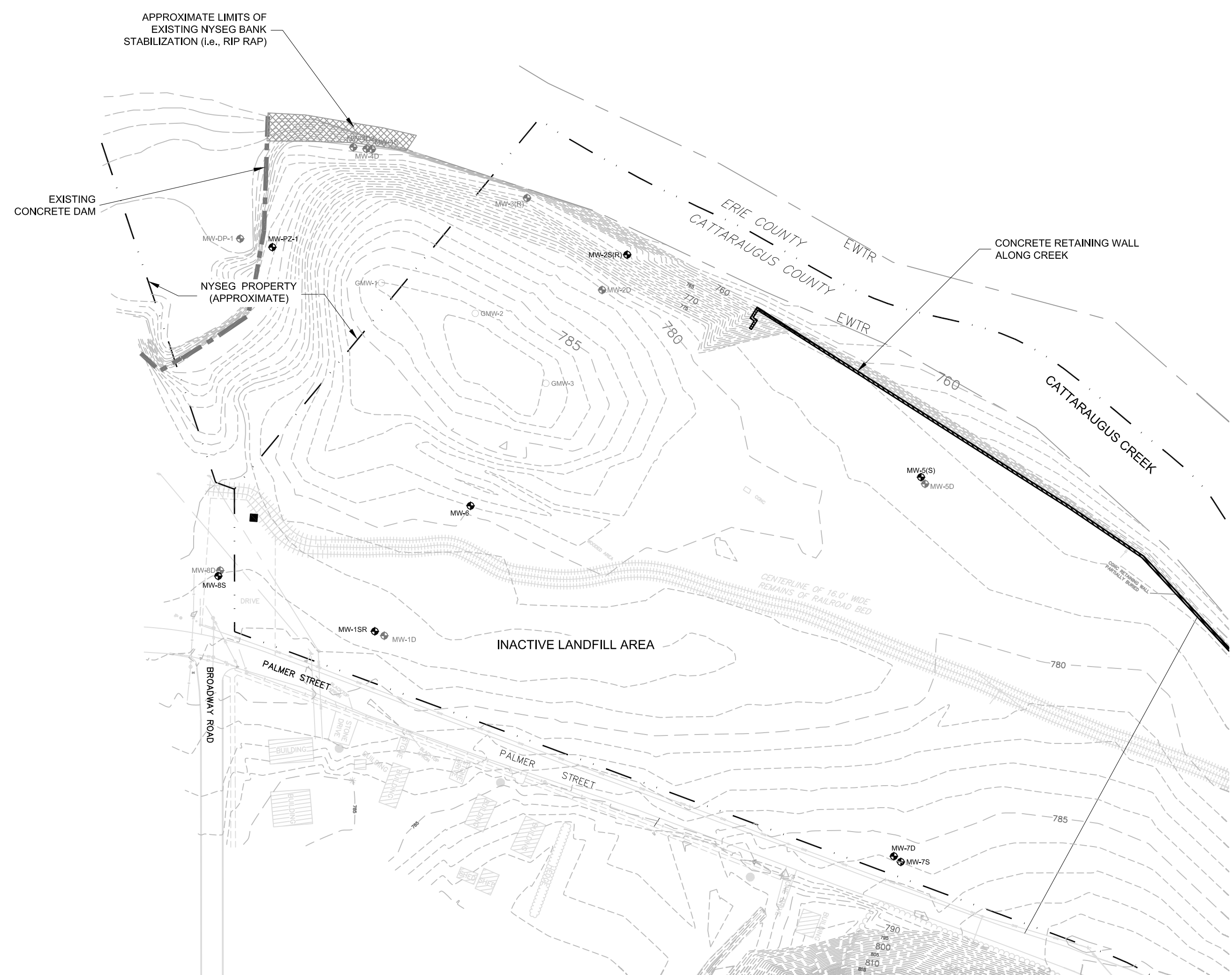
BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
 2558 HAMBURG TURNPIKE
 SUITE 200A, NEW YORK 14218
 (716) 856-0589
 JOB NO.: 0021-001-900

REVISIONS	
NO.	DATE

DRAWN BY: WJMT/AJZ	DATE: JULY 2009
CHECKED BY: THF	APPROVED BY:

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY CERTIFIES THAT THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE FIELD SURVEY AND AS SHOWN SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECTS WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

EXISTING SITE PLAN
 REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
 GOWANDA, NEW YORK
 PREPARED FOR
 SITE RESPONDENTS

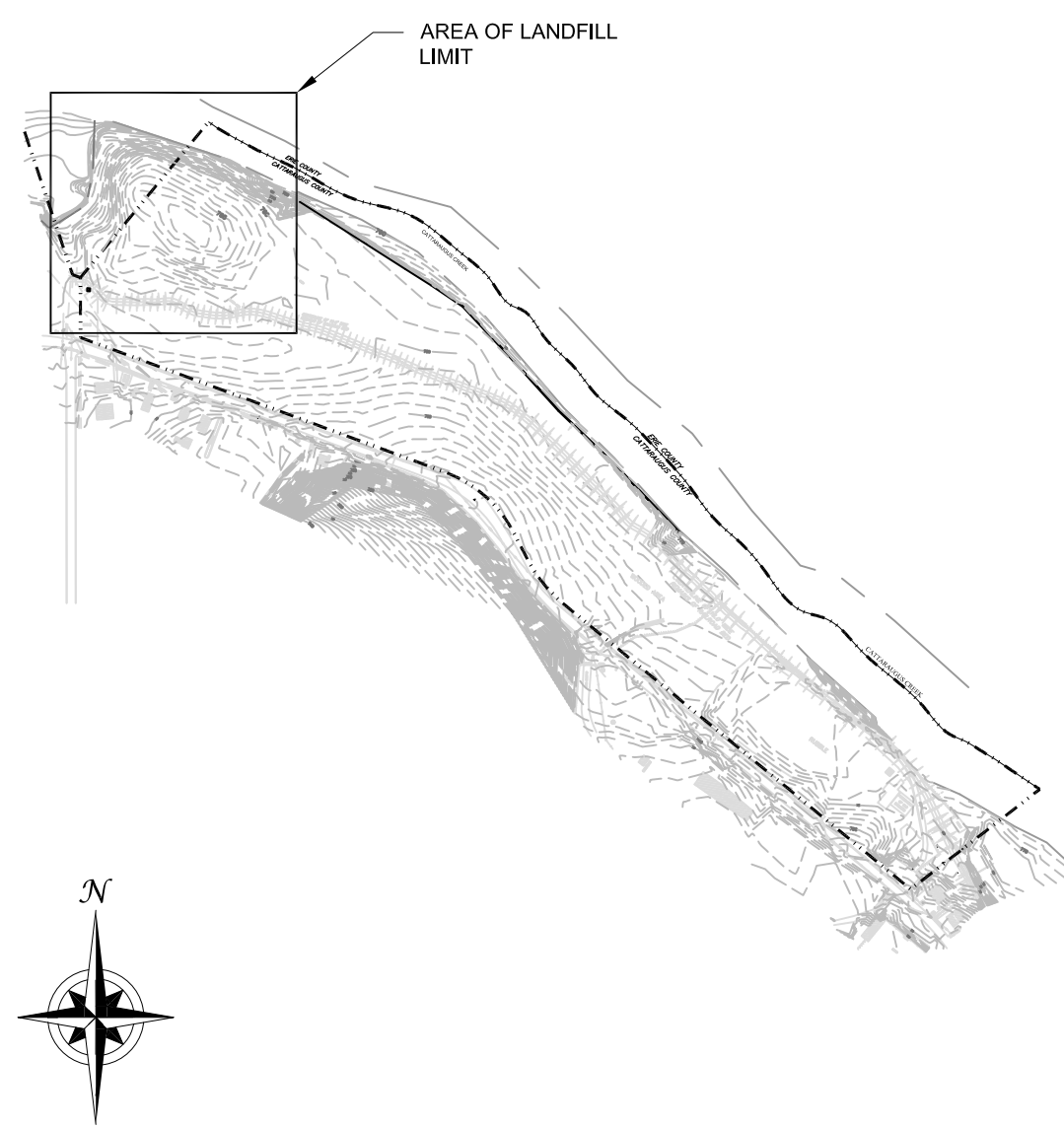


WASTE/FILL TOPO
SCALE: 1" = 100'

NOTES:

1. BASE SURVEY SHOWN PROVIDED BY TVGA CONSULTANTS (2000). BENCHMARK DOES NOT ASSUME RESPONSIBILITY FOR ANY INACCURACIES AS SHOWN ON THIS DRAWING. CONTRACTOR TO CONFIRM AND/OR VERIFY ALL INFORMATION PRIOR TO ANY CONSTRUCTION ACTIVITIES.

- LEGEND:**
- MW-1SR ● MONITORING WELL LOCATION
 - MW-1D ● MONITORING WELL (TO BE REMOVED)
 - GMW-1 ○ LANDFILL GAS MONITORING WELL (TO BE REMOVED)
 - - - - - PROPERTY BOUNDARY
 - - - - - SLUDGE/FILL LIMIT (R)



SITE LAYOUT
SCALE: 1" = 500'



BANK STABILIZATION AND LEACHATE COLLECTION CONCEPT
SCALE: 1" = 100'

CONCEPT SCOPE:

1. CREEK BANK WILL BE CUT BACK AND REGRADED TO APPROXIMATELY 2H:1V AND LINED WITH GEOSYNTHETICS AND STONE PER THE CONTRACT DOCUMENTS.
2. A LEACHATE COLLECTION PIPE WILL BE INSTALLED AT THE TOE OF THE SLOPE AND INTO THE SHALE BEDROCK TO COLLECT SEEPS FROM THE LANDFILL AND PRE-TREAT, TRANSFER, AND DISCHARGE TO THE SANITARY SEWER.
3. THE LANDFILL ELEVATED FILL AREA WILL BE REGRADED TO ACCOUNT FOR SOIL/FILL REMOVED FROM THE BANK AND TO CREATE POSITIVE DRAINAGE.
4. CONSOLIDATED WASTE/FILL WILL BE GRADED TO PROMOTE PROPER POSITIVE WATER RUNOFF.
5. CONSOLIDATED WASTE/FILL WILL BE COVERED WITH 18-INCHES OF LOW-PERMEABILITY SOIL (1X10⁻⁶ CM/SEC OR LESS) AND 6-INCHES OF TOPSOIL. COVER SOILS WILL BE SEEDDED WITH APPROPRIATE SEED MIX TO PROVIDE A GOOD STAND OF GRASS AND MITIGATE EROSION.
6. PASSIVE GAS VENTS ARE TO BE INSTALLED AT 1 PER ACRE.

BANK STABILIZATION AND LEACHATE COLLECTION CONCEPT

REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK

PREPARED FOR
SITE RESPONDENTS

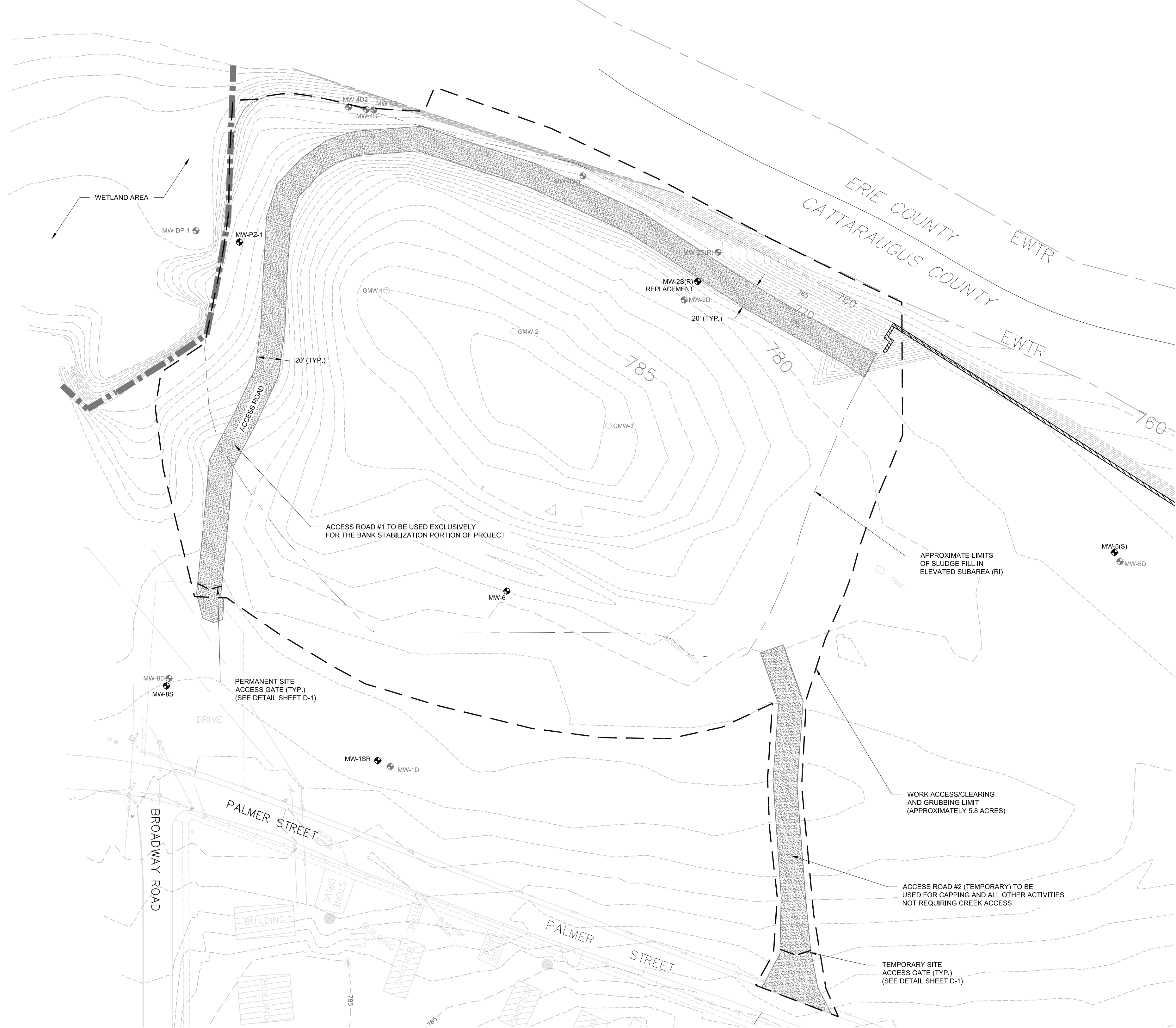
DRAWN BY: WJMJ/AJZ
DATE: JULY 2009
CHECKED BY: THF
APPROVED BY:

DISCLAIMER: BENCHMARK ENGINEERING & SCIENCE, PLLC, HEREBY CERTIFIES THAT THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS NOT TO BE REPRODUCED, COPIED, DISCLOSED OR REPRODUCED IN ANY FORM FOR THE SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENGINEERING & SCIENCE, PLLC.

REVISIONS

NO.	BY	DATE	REMARKS

SEAL



LEGEND:

- MW-15R ● MONITORING WELL LOCATION
- MW-1D ● MONITORING WELL (TO BE REMOVED)
- GMW-1 ○ LANDFILL GAS MONITORING WELL (TO BE REMOVED)
- - - SLUDGE/FILL LIMIT (RI)
- CLEARING/GRUBBING BOUNDARY LIMIT

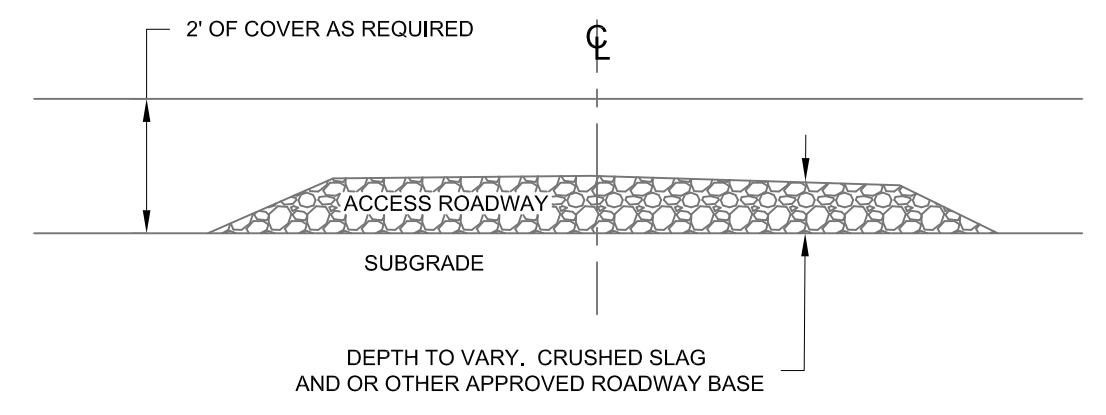
ACCESS, CLEARING, & GRUBBING LIMITS

SCALE: 1" = 50'

- NOTES:**
1. BASE SURVEY SHOWN PROVIDED BY TVGA CONSULTANTS (2000). BENCHMARK DOES NOT ASSUME RESPONSIBILITY FOR ANY INACCURACIES AS SHOWN ON THIS DRAWING. CONTRACTOR TO CONFIRM AND/OR VERIFY ALL INFORMATION PRIOR TO ANY CONSTRUCTION ACTIVITIES.
 2. CLEARING LIMITS SHALL BE WITHIN THE AREAS SHOWN. DAMAGE OUTSIDE THESE LIMITS CAUSED BY THE SUBCONTRACTOR'S OPERATIONS SHALL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.
 3. CLEARING AND GRUBBING LIMITS MAY BE EXTENDED. AT THE SUBCONTRACTOR'S EXPENSE, TO APPROXIMATELY 25' OUTSIDE DEFINED LIMITS OR AS OTHERWISE APPROVED BY BENCHMARK TO FACILITATE ACCESS. NO DISTURBANCE SHALL BE PERMITTED WITHIN WETLAND AREAS UNLESS REQUIRED FOR REMEDIAL PURPOSES.
 - 3.A. CUT ALL EXISTING VEGETATION WITHIN THE CLEARING LIMIT LINES AND ALL EXISTING VEGETATION TO GRADE.
 - 3.B. STRIP ALL VEGETATION FROM AREAS REQUIRING COVER SOILS. PLACE NO FINAL COVER SYSTEM MATERIALS DIRECTLY ON TOP OF GRASS OR VEGETATION.
 - 3.C. ALL TREE STUMPS, LARGE AND SMALL TREES, AND LARGE AND SMALL BRANCHES WITHIN THE PROPOSED CLEARING LIMITS (EXCLUDING WETLAND AREAS) WILL BE REMOVED FROM THE SITE OR CHIPPED AND DISPOSED IN A LAYER NO MORE THAN TWO-INCHES THICK ACROSS THE CONSOLIDATION AREA SUBGRADE OR SPREAD ONSITE IN A LOCATION ACCEPTABLE TO BENCHMARK IN A MANNER THAT PREVENTS SETTLING.
 - 3.D. BURY WASTE, VEGETATION AND DEBRIS WITHIN THE CONSOLIDATION AREA SUBGRADE IN A MANNER TO PREVENT SOIL SETTLEMENT FROM OCCURRING. DO NOT BURY LARGE POCKETS OR PILES OF STUMPS, MULCH OR OTHER DEBRIS.
 4. BURNING ON SITE SHALL NOT BE DONE UNLESS APPROVED BY AUTHORITIES HAVING JURISDICTION. ALL BURNING, ON OR OFF THE SITE, SHALL BE IN COMPLETE ACCORDANCE WITH RULES AND REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION.
 5. ALL DISTURBED AREAS WILL BE RESTORED WITH AN APPROVED SEED MIX.
 6. MONITORING WELLS PZ-1, 1SR, 2SR, 5S, 6, AND 8S TO REMAIN AND SHALL BE PROTECTED FROM DAMAGE BY SUBCONTRACTOR. MONITORING WELLS NOT CITED ABOVE TO BE DECOMMISSIONED (SEE SCHEDULE BELOW). NEW PROTECTIVE CASINGS WILL BE INSTALLED AS NEEDED BY BENCHMARK.
 7. ACCESS ROADWAYS TO BE CONSTRUCTED USING CRUSHED SLAG AND/OR OTHER APPROVED MATERIAL TO SUFFICIENTLY SUPPORT FULLY LOADED CONSTRUCTION VEHICLES. SUBCONTRACTOR TO INSTALL ANY AND ALL INFRASTRUCTURE NECESSARY TO MAINTAIN PROPER DRAINAGE AND RUNOFF ALONG PALMER STREET AND ACCESS ROADWAYS.
 8. SUBCONTRACTOR RESPONSIBLE FOR ALL VILLAGE AND MUNICIPAL PERMITS AND APPROVALS FOR ACCESS ROADWAY #2 (PALMER STREET ENTRANCE).
 9. SITE ACCESS GATE TO BE INSTALLED BY CONTRACTOR AT CREEK ACCESS ROAD.

MONITORING WELL ID	STATUS*
PZ-1	TO REMAIN
DP-1	TO BE DECOMMISSIONED
GMW-1	TO BE DECOMMISSIONED
GMW-2	TO BE DECOMMISSIONED
GMW-3	TO BE DECOMMISSIONED
MW-1SR	TO REMAIN
MW-1D	TO BE DECOMMISSIONED
MW-2S(R)	TO REMAIN
MW-2D	TO BE DECOMMISSIONED
MW-3(R)	TO BE DECOMMISSIONED
MW-4S	TO BE DECOMMISSIONED
MW-4D	TO BE DECOMMISSIONED
MW-4DZ	TO BE DECOMMISSIONED
MW-5(S)	TO REMAIN
MW-5D	TO BE DECOMMISSIONED
MW-6	TO REMAIN
MW-8S	TO REMAIN
MW-8D	TO BE DECOMMISSIONED

* ALL WELLS SLATED FOR DECOMMISSIONING WILL BE REMOVED BY BENCHMARK WITH THE EXCEPTION OF GAS MONITORING WELLS GMW-1 THROUGH GMW-3 WHICH SHALL BE REMOVED BY SUBCONTRACTOR.



TYPICAL ACCESS ROAD CROSS SECTION

SCALE: NTS

NO.	BY	DATE	REMARKS

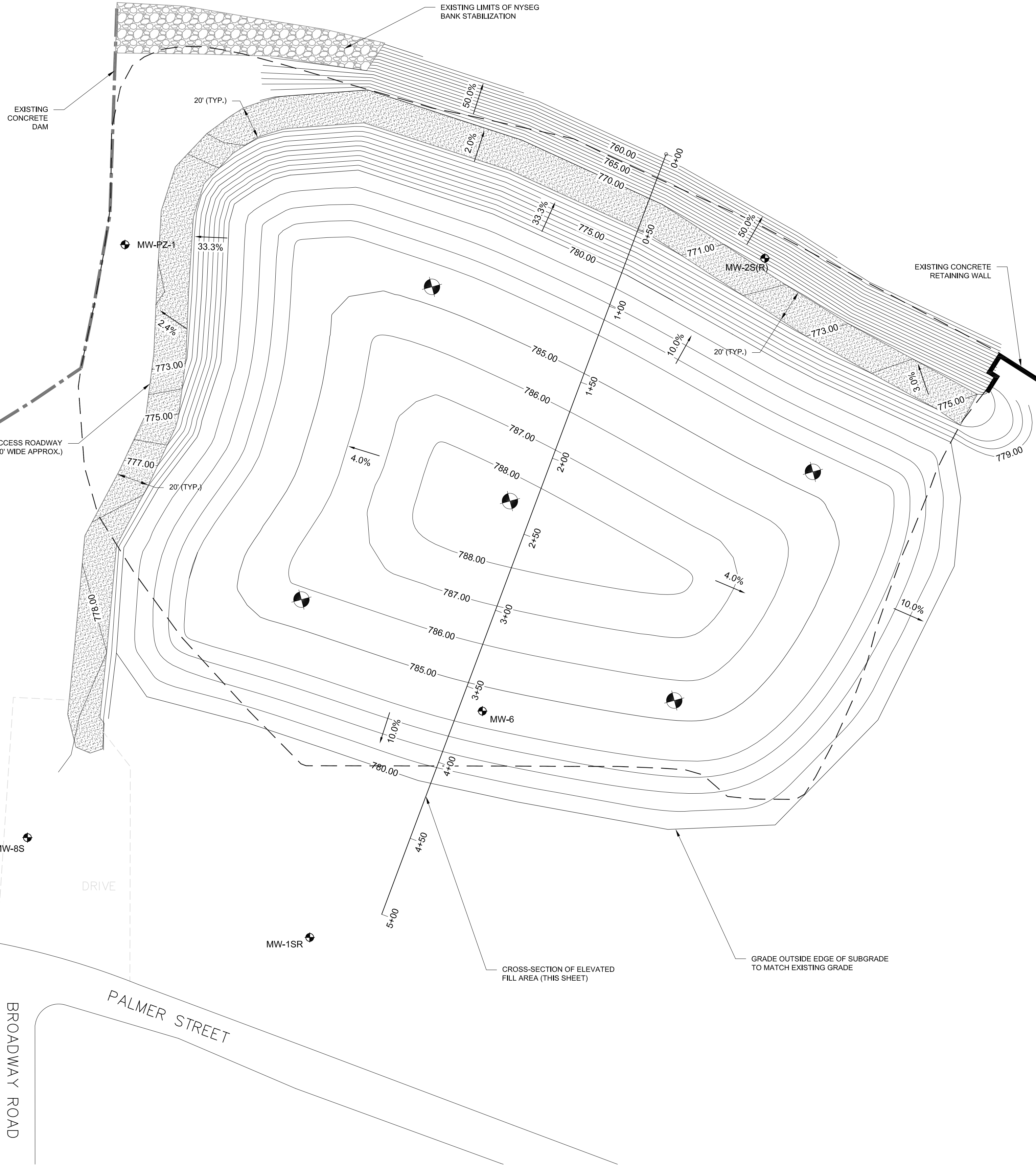
SEAL

DRAWN BY: WJM/AJZ
 DATE: JULY 2009
 CHECKED BY: THF
 APPROVED BY:

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY CERTIFIES THAT THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO REGULATION AT ANY TIME. IT SHALL BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE SUBCONTRACTOR'S USE WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

SITE ACCESS, WORK, & CLEARING / GRUBBING LIMITS

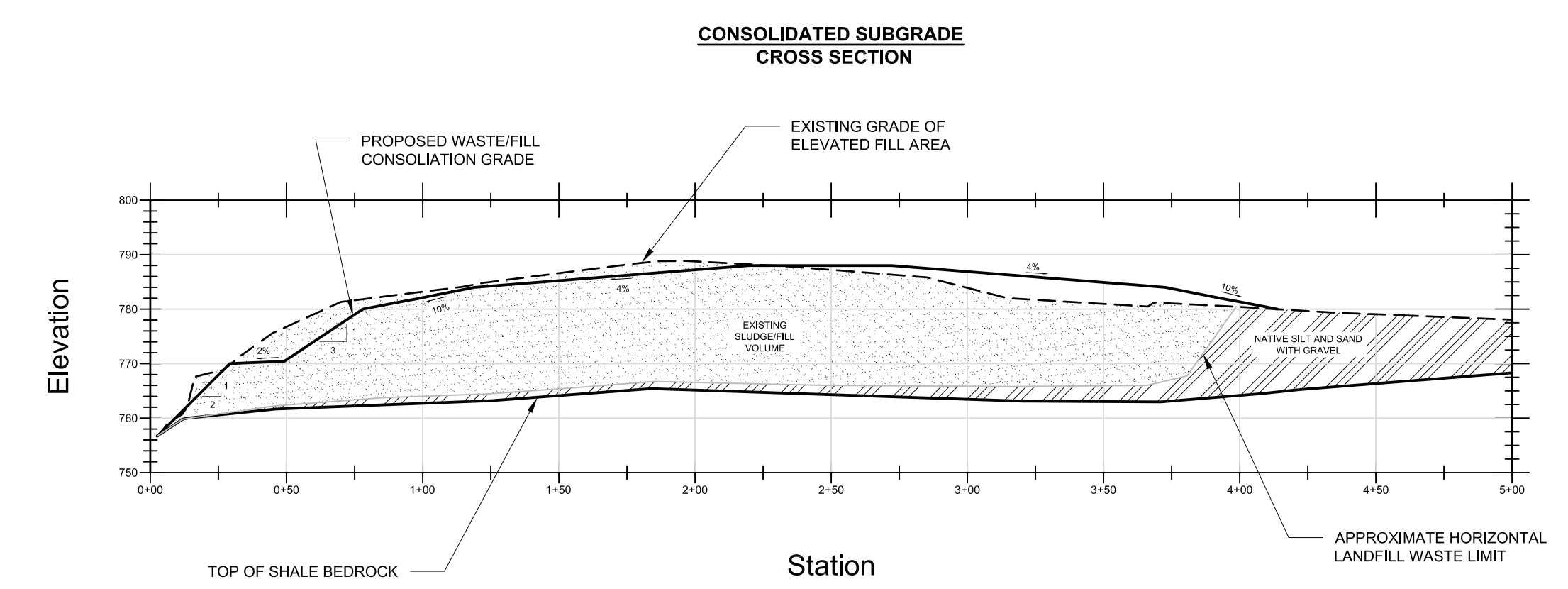
REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
 GOWANDA, NEW YORK
 PREPARED FOR: SITE RESPONDENTS



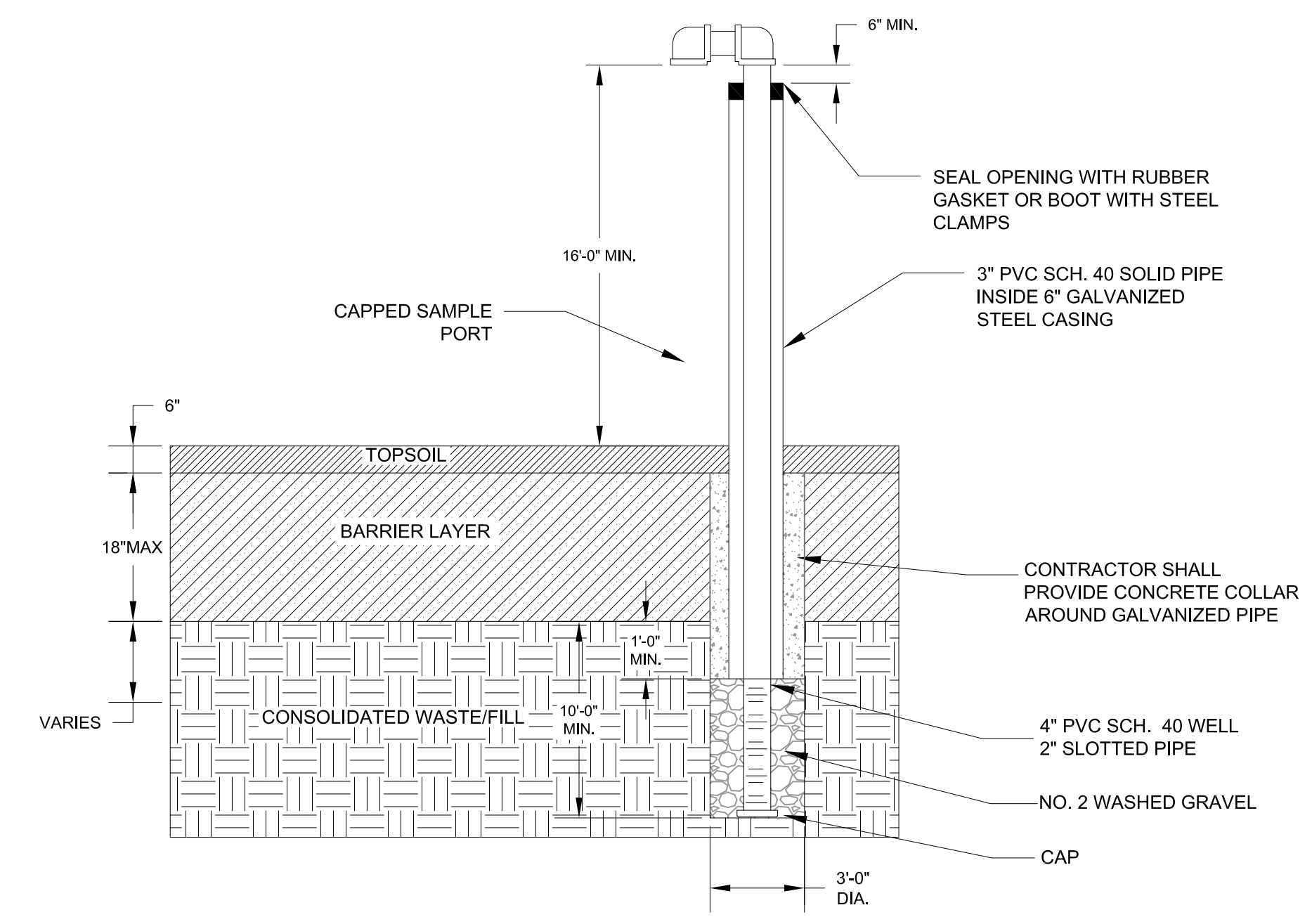
CONSOLIDATED WASTE/FILL SUB-GRADING PLAN
SCALE: 1" = 40'

- LEGEND**
- PROPOSED MAJOR CONTOUR (SUB-GRADE)
 - PROPOSED MINOR CONTOUR (SUB-GRADE)
 - - - APPROXIMATE WASTE LIMIT (NOVEMBER 2003 RI)
 - PROPOSED GAS VENT
 - MONITORING WELL (TO REMAIN)

- NOTES:**
- ALL WORK SHALL PROCEED IN ACCORDANCE WITH THESE CONTRACT DRAWINGS AND ASSOCIATED SPECIFICATIONS. GUIDELINES TO INCLUDE, BUT NOT BE LIMITED TO:
- A. FINAL ELEVATIONS AND GRADING ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON ACTUAL IN-PLACE VOLUME OF CONSOLIDATED WASTE/FILL. CONSOLIDATION AREA SLOPE SHALL BE ADJUSTED IF NECESSARY BASED ON ACTUAL AMOUNT OF WASTE/FILL CONSOLIDATED. MINIMUM ALLOWABLE SLOPE = 4% AND MAXIMUM ALLOWABLE SLOPE = 33% WITHIN LANDFILL. MAXIMUM ALLOWABLE SLOPE OF 50% ALONG CREEK BANK STABILIZATION AREA.
 - B. UNIFORMLY GRADE AREAS INCLUDING ADJACENT TRANSITION AREAS. SMOOTH SUBGRADE SURFACES WITHIN SPECIFIED TOLERANCES. COMPACT WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES.
 - C. BENCHMARK TO PERFORM PRE AND POST SURVEY AS REQUIRED FOR MEASUREMENT AND PAYMENT. BENCHMARK WILL PROVIDE ALL REQUIRED LAYOUT, GRADE STAKING, AND ALL OTHER SURVEY REQUIRED FOR CONSTRUCTION ACTIVITIES.
 - D. AFTER GRADING, COMPACT SUBGRADE TO THE DEPTH AND PERCENTAGE OF MAXIMUM DENSITY AS SPECIFIED IN SECTION 02250 - FINAL CONSTRUCTION COVER OF THE ACCOMPANYING SPECIFICATIONS.
 - E. PROOF-ROLL CONSOLIDATION AREA SUBGRADE PRIOR TO PLACEMENT OF BARRIER LAYER.
 - F. IF QUALITY ASSURANCE TESTING SHOWS COMPACTION BELOW SPECIFIED DENSITY, PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE TO BENCHMARK OR RESPONDENTS.



CONSOLIDATED SUB-GRADE CROSS SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 25'



TYPICAL PASSIVE VENT DETAIL
N.T.S.

REVISIONS		
NO.	BY	DATE

SEAL

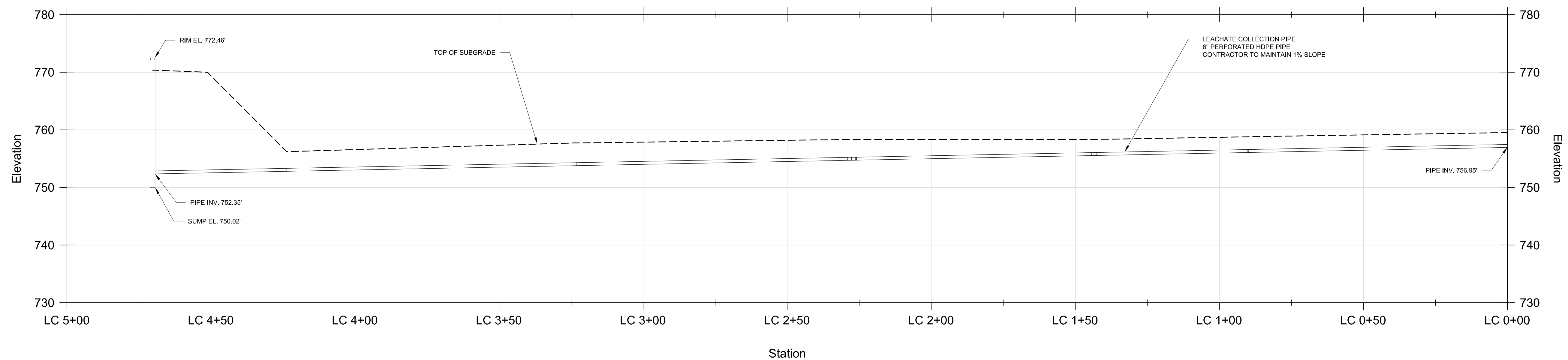
DRAWN BY: WJMJ/AJZ	DATE: JULY 2009
CHECKED BY: THF	APPROVED BY:

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY CERTIFIES THAT THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND USE ONLY. IT IS NOT TO BE REPRODUCED, COPIED, REPRODUCED OR REPRODUCED IN ANY FORM FOR THE PURPOSES OF CONTRACTS OR SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

CONSOLIDATED WASTE/FILL SUBGRADE PLAN
WASTE/FILL CONSOLIDATION

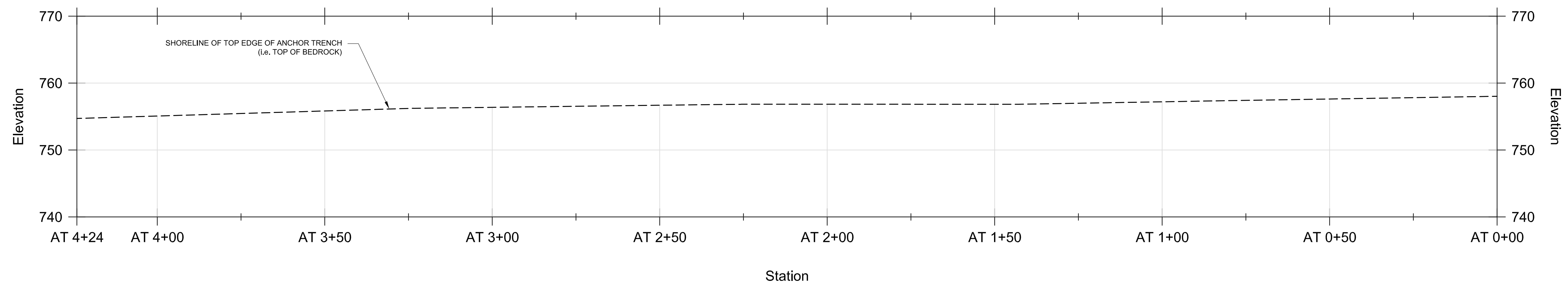
REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK

PREPARED FOR
SITE RESPONDENTS



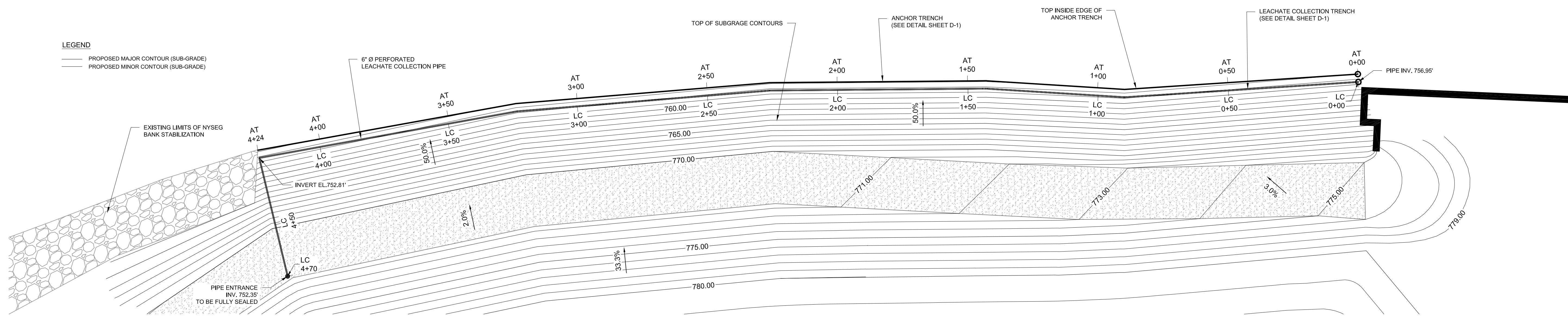
LEACHATE COLLECTION PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'



ANCHOR TRENCH PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'



LEACHATE COLLECTION & ANCHOR TRENCH ALIGNMENT

SCALE: 1" = 20'



BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC
255B HAMBURG TURNPIKE
SUITE 200A, NEW YORK 14218
SUKKAVANA, NEW YORK 14218
(716) 856-0589
JOB NO.: 0021-001-900

REVISIONS		REMARKS	
NO.	BY	DATE	

SEAL

DRAWN BY: WJM/AJZ	DATE: JULY 2009
CHECKED BY: THF	
APPROVED BY:	

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY DISCLAIMS THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS NOT TO BE REPRODUCED OR REPRODUCED IN ANY FORM FOR THE USE OF ANY OTHER PROJECT OR SITE WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

LEACHATE COLLECTION SYSTEM & ANCHOR TRENCH PLAN & PROFILE

REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK
PREPARED FOR
SITE RESPONDENTS

NO.	BY	DATE	REMARKS

SEAL

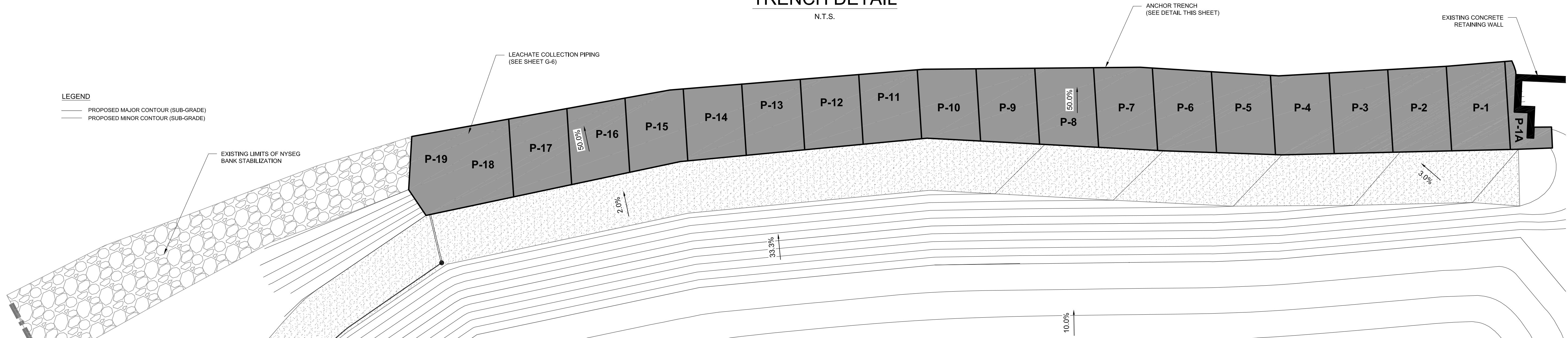
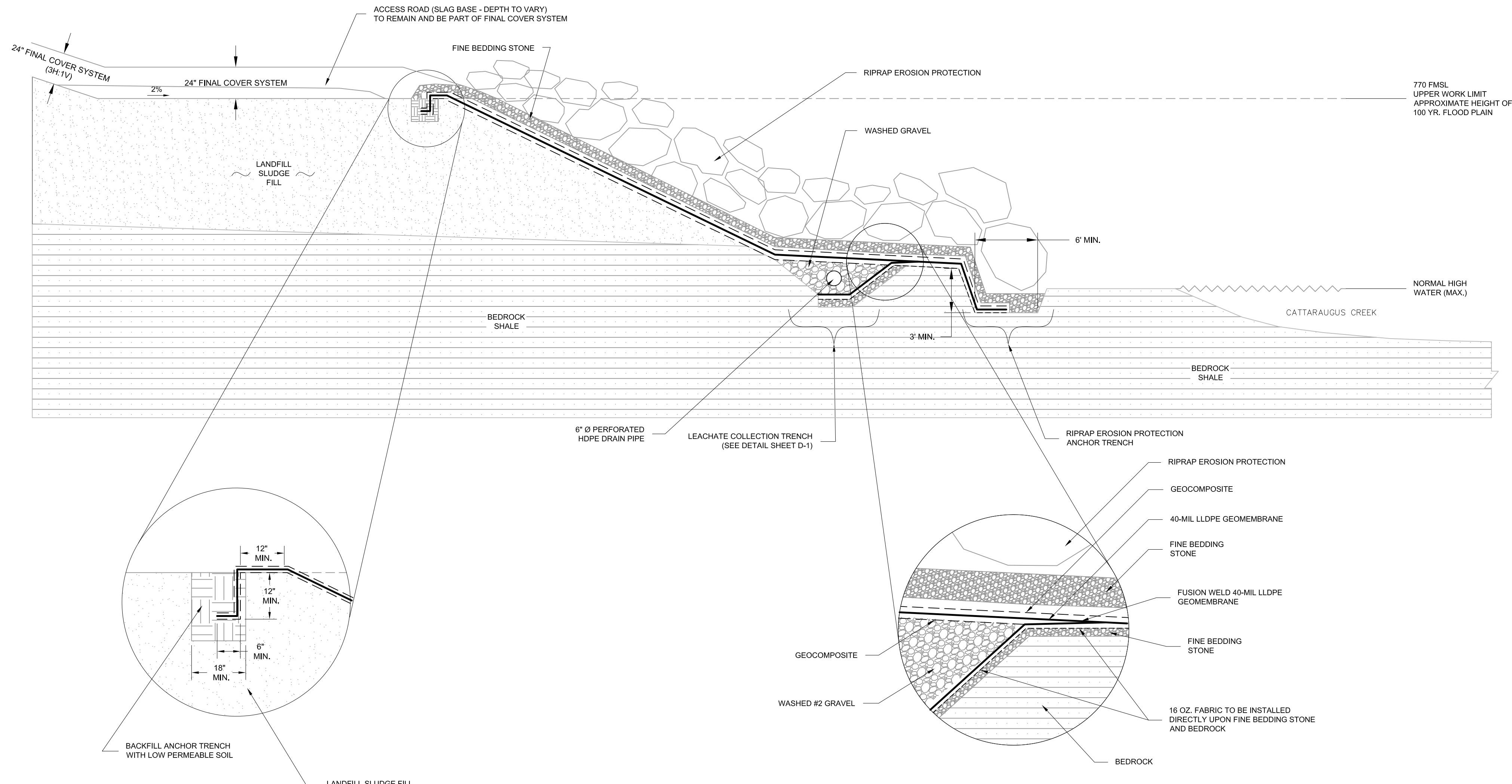
DRAWN BY:	WJM / AJZ
DATE:	JULY 2009
CHECKED BY:	THF
APPROVED BY:	

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY STATES THAT THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT OR AS SUCH IS SUBJECT TO REGULATION BY ANY STATE OR FEDERAL AGENCY. THIS DRAWING IS THE PROPERTY OF BENCHMARK EES, PLLC AND SHALL BE KEPT CONFIDENTIAL AND NOT REPRODUCED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

BANK STABILIZATION DETAIL & GEOMEMBRANE PANEL LAYOUT

REMEDIATION DESIGN-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK

PREPARED FOR
SITE RESPONDENTS

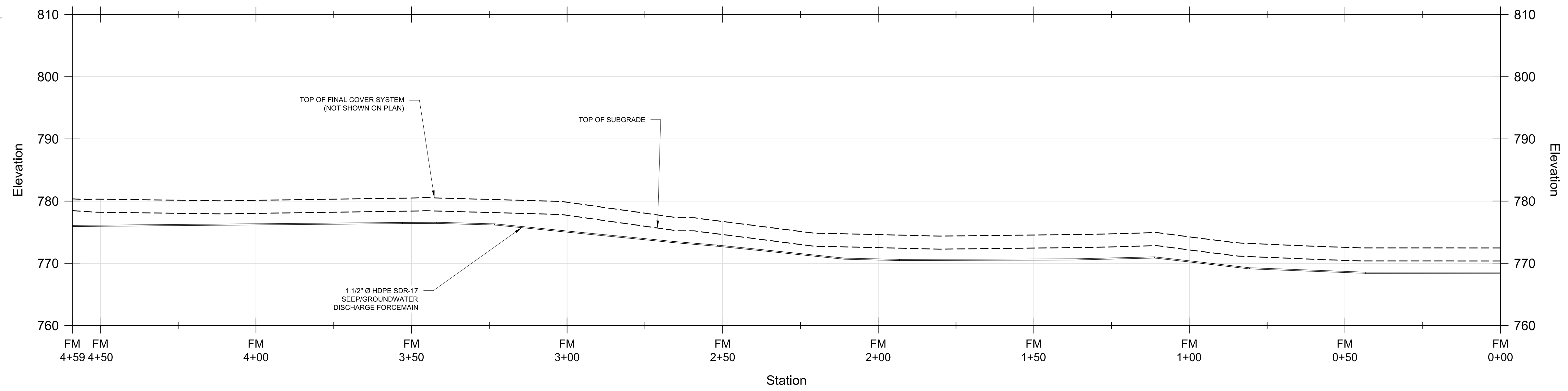


LEGEND
 --- GEOCOMPOSITE
 --- 40-MIL LLDPE GEOMEMBRANE
 --- GEOSYNTHETIC CLAY LINER (GCL)

LEGEND
 --- PROPOSED MAJOR CONTOUR (SUB-GRADE)
 --- PROPOSED MINOR CONTOUR (SUB-GRADE)

NOTES:

1. FORCEMAIN TO BE INSTALLED AT DEPTH TO BE A MINIMUM OF 42" BELOW FINAL GRADE (INCLUDING FINAL COVER).
2. FORCEMAIN PROFILE SAGS AND EXTREME PITCH CHANGES SHOULD BE AVOIDED.
3. ALL PIPE TO BE INSTALLED AS PER ATTACHED SPECIFICATION AND MANUFACTURERS RECOMMENDATIONS.

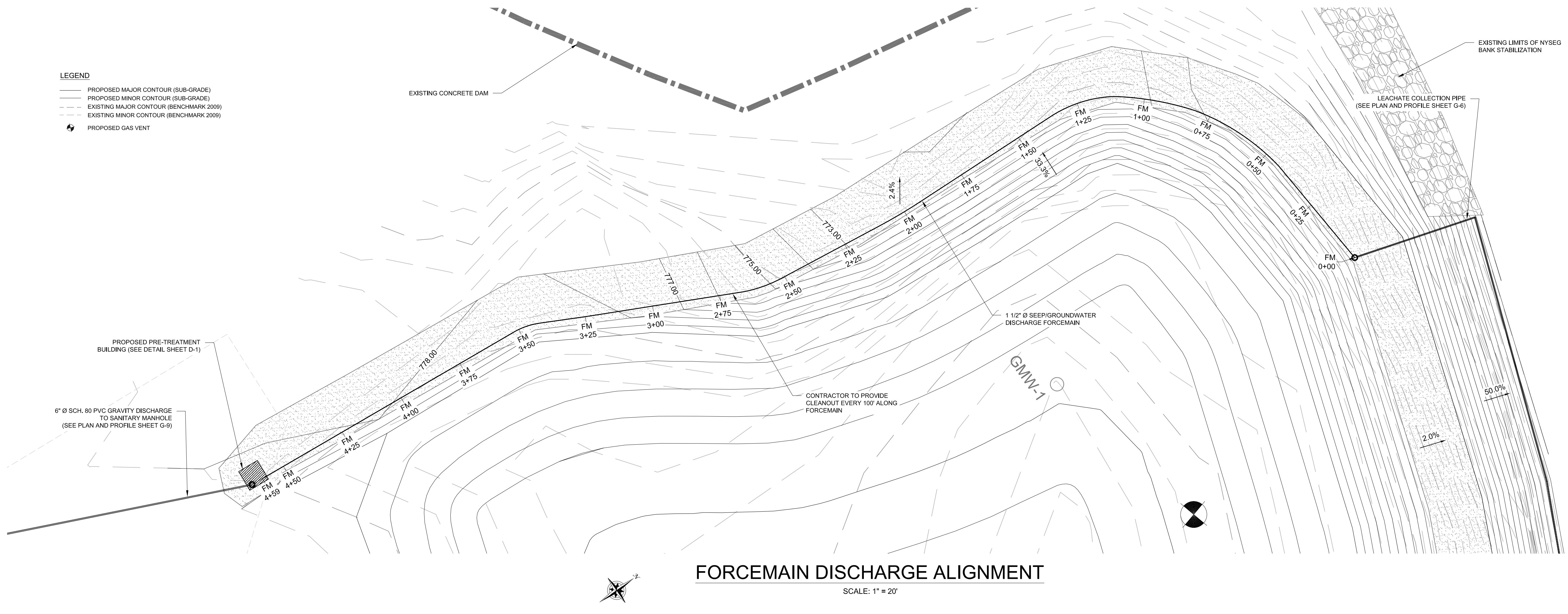


FORCEMAIN DISCHARGE PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

LEGEND

- PROPOSED MAJOR CONTOUR (SUB-GRADE)
- PROPOSED MINOR CONTOUR (SUB-GRADE)
- - - EXISTING MAJOR CONTOUR (BENCHMARK 2009)
- - - EXISTING MINOR CONTOUR (BENCHMARK 2009)
- ⊙ PROPOSED GAS VENT



FORCEMAIN DISCHARGE ALIGNMENT

SCALE: 1" = 20'

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

255B HAMBURG TURNPIKE
SUDBURY, NEW YORK 14218
TEL: 518-885-7200
FAX: 518-885-0589
(716) 856-0589

JOB NO.: 0021-001-900

REVISIONS	
NO.	DATE

SEAL

DRAWN BY: WJM/AJZ	DATE: JULY 2009
CHECKED BY: THF	APPROVED BY:

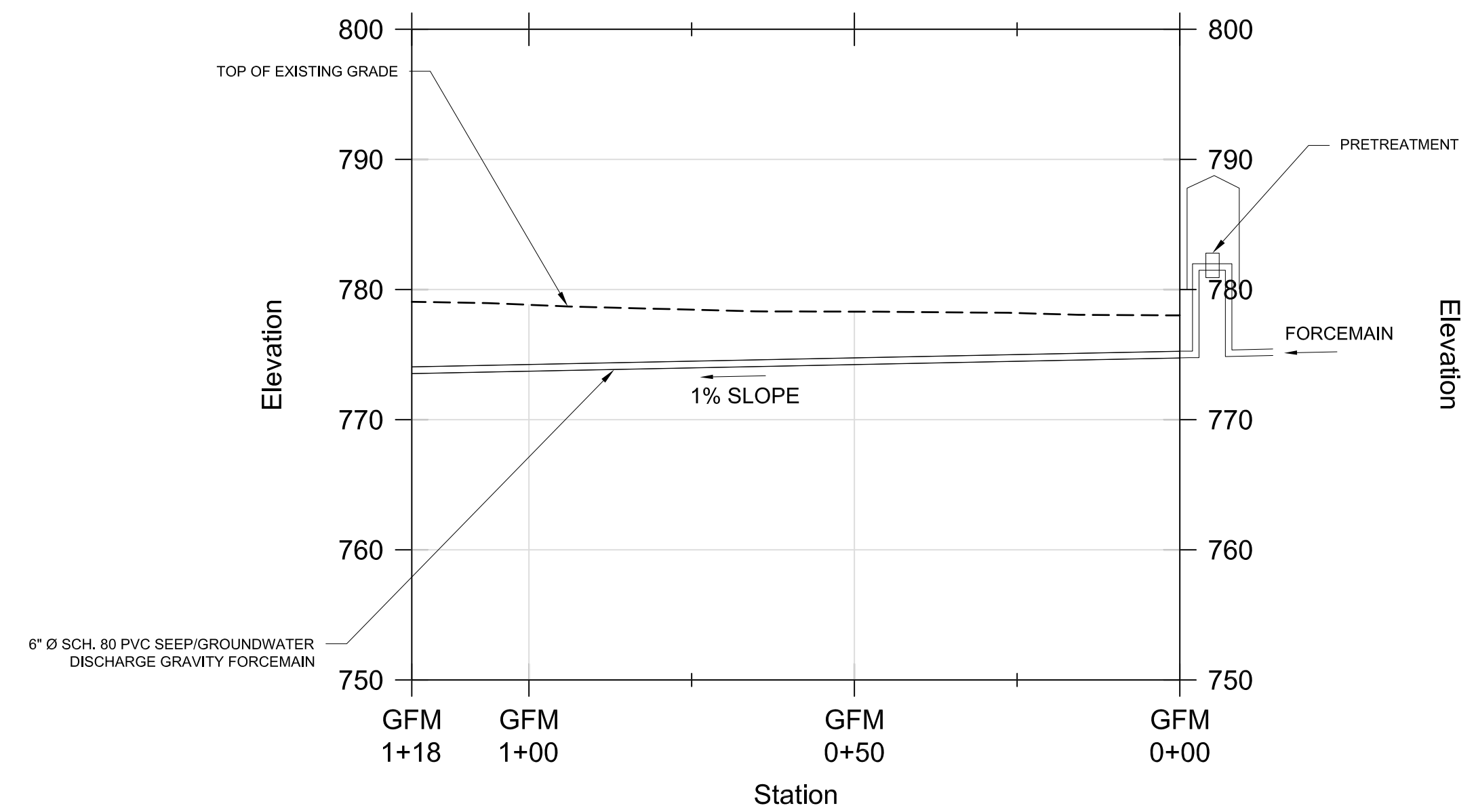
DISCLAIMER: BENCHMARK EES, PLLC, HEREBY DISCLAIMS THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO FREQUENT CHANGE. THIS DRAWING IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

**LEACHATE DISCHARGE FORCEMAIN
PLAN & PROFILE**

REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK

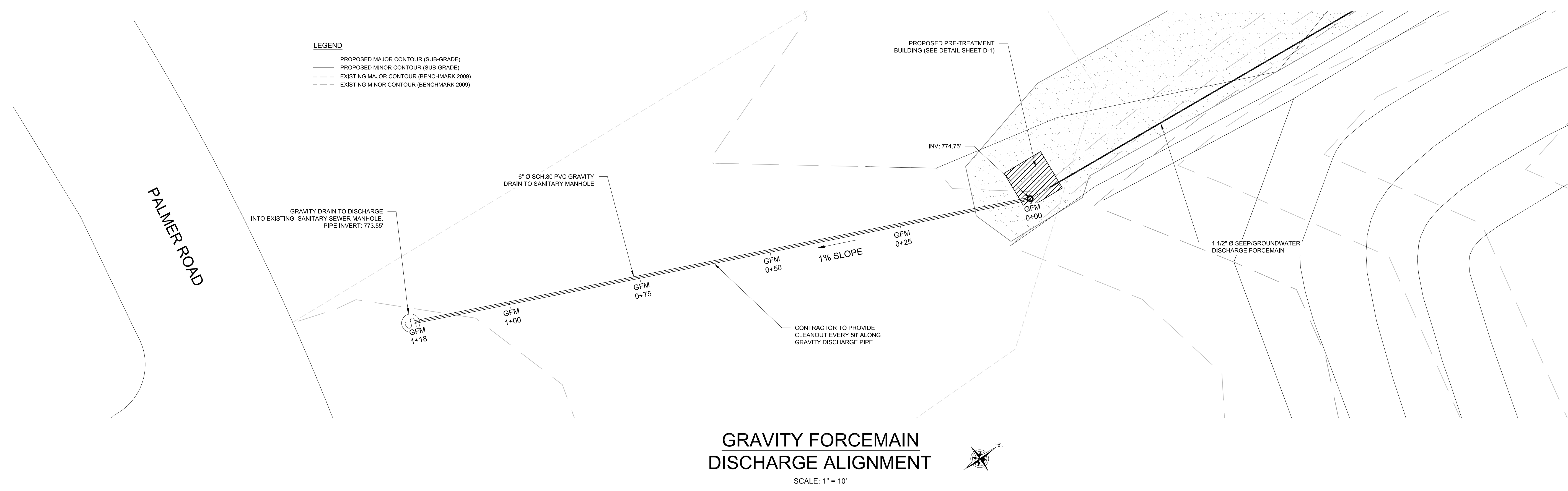
PREPARED FOR
SITE RESPONDENTS

- NOTES:
1. SUBCONTRACTOR TO INSTALL GRAVITY DRAIN ACCORDING TO THESE PLANS AND SPECIFICATION AND MANUFACTURER'S RECOMMENDATIONS.
 2. GRAVITY DISCHARGE TO MAINTAIN 1% SLOPE.
 3. A MINIMUM OF 36" OF COVER IS REQUIRED ABOVE DISCHARGE PIPE.



**GRAVITY FORCEMAIN
 DISCHARGE PROFILE**
 HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

- LEGEND
- PROPOSED MAJOR CONTOUR (SUB-GRADE)
 - PROPOSED MINOR CONTOUR (SUB-GRADE)
 - - - EXISTING MAJOR CONTOUR (BENCHMARK 2009)
 - - - EXISTING MINOR CONTOUR (BENCHMARK 2009)



REVISIONS		REMARKS
NO.	BY	DATE

SEAL

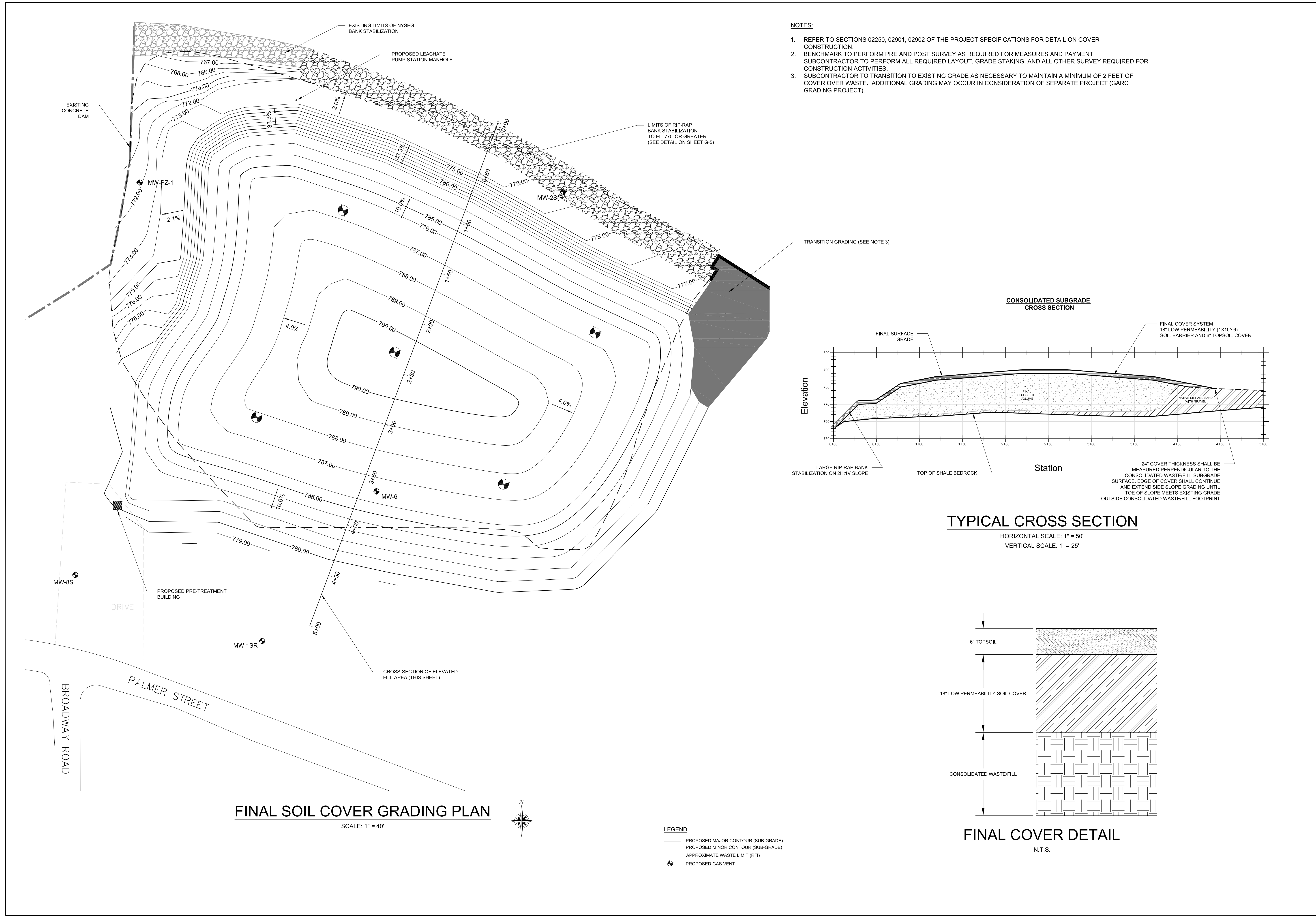
DRAWN BY:	WJM/AJZ
DATE:	JULY 2009
CHECKED BY:	THF
APPROVED BY:	

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY DISCLAIMS THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

**LEACHATE DISCHARGE GRAVITY FORCEMAIN
 PLAN & PROFILE**

REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
 GOWANDA, NEW YORK

PREPARED FOR
 SITE RESPONDENTS

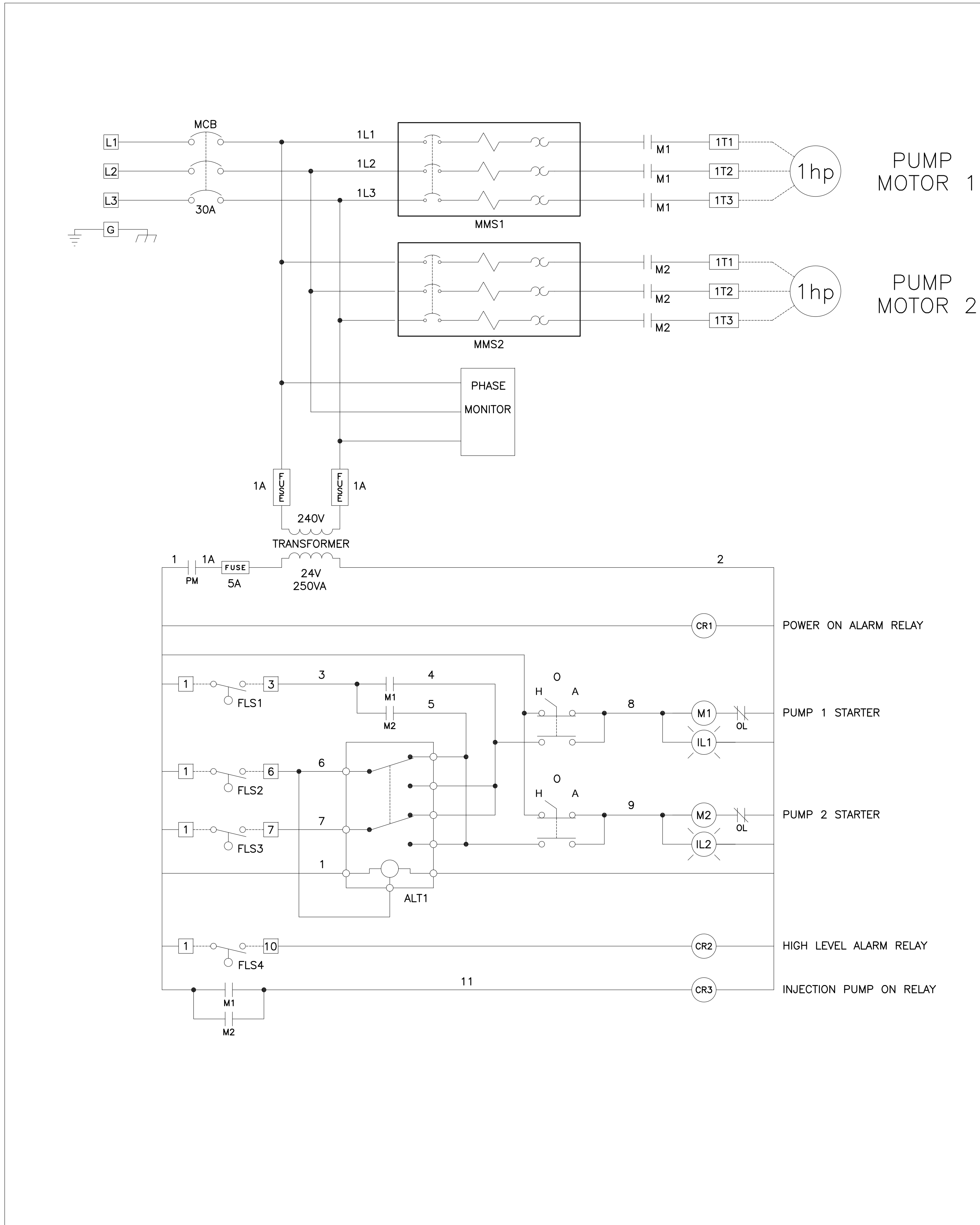


REVISIONS		REMARKS
NO.	BY	DATE

SEAL

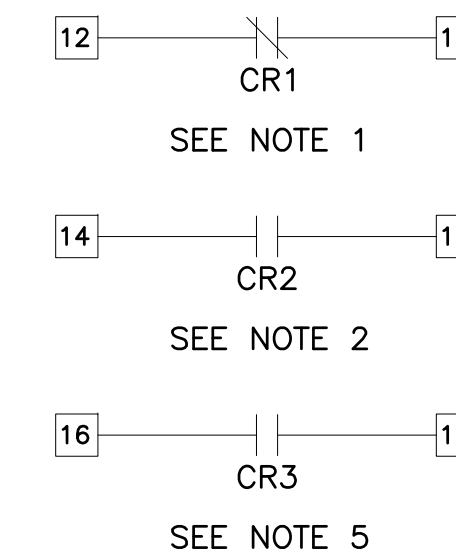
DRAWN BY: WUMI/AJZ	DATE: JULY 2009
CHECKED BY: THF	APPROVED BY:

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY CERTIFIES THAT THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS NOT TO BE REPRODUCED OR REPRODUCED IN ANY FORM FOR THE USE OF ANY OTHER PROJECT OR FOR THE USE OF ANY OTHER SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.



- NOTES:**
- 1) RELAY CR1 IS USED FOR CONTROL POWER LOSS PROTECTION. IT IS CONNECTED TO THE PHONE DIALER SO AS TO SET AN ALARM IF IT IS DE-ENERGIZED.
 - 2) RELAY CR2 IS USED FOR THE HIGH LEVEL ALARM. IT IS CONNECTED TO THE PHONE DIALER SO AS TO SET AN ALARM IF IT IS ENERGIZED.
 - 3) THE CONTROL PANEL IS FED FROM A 120V/208V 3 PHASE POWER PANEL.
 - 4) ALL FLOAT SWITCHES ARE TO BE NORMALLY OPEN WHEN HANGING.
 - 5) RELAY CR3 IS USED TO CONTROL A WALL RECEPTACLE THAT FEEDS THE INJECTION PUMP. THE 120V NEEDED TO POWER THE RECEPTACLE IS FROM THE CIRCUIT BREAKER PANEL, NOT THE PUMP PANEL.

FRP BUILDING
 NTS



THE DESIGN CONTAINED ON THIS DRAWING WAS ORIGINATED BY AND IS THE EXCLUSIVE PROPERTY OF MODERN ELECTRICAL CONSTRUCTION INC. IT IS FURNISHED FOR CUSTOMER INFORMATION ONLY AND IS NOT AN AUTHORIZATION OR LICENSE TO MAKE THIS CONSTRUCTION OR TO FURNISH THIS INFORMATION TO OTHERS.

(716) 434-7126

MODERN ELECTRICAL CONSTRUCTION INC.
 5883 S. TRANSIT RD.
 LOCKPORT, NY 14095

TITLE: PETER COOPER
 GOWANDA SUPERFUND SITE
 PALMER & BROADWAY
 GOWANDA, NEW YORK

DWG. # ME-000281-E1 DWG. SIZE: D
 DATE: 2/16/09 PG: 1 of 3 SCALE: N.A.

REVISIONS

NO.	BY	DATE	REMARKS

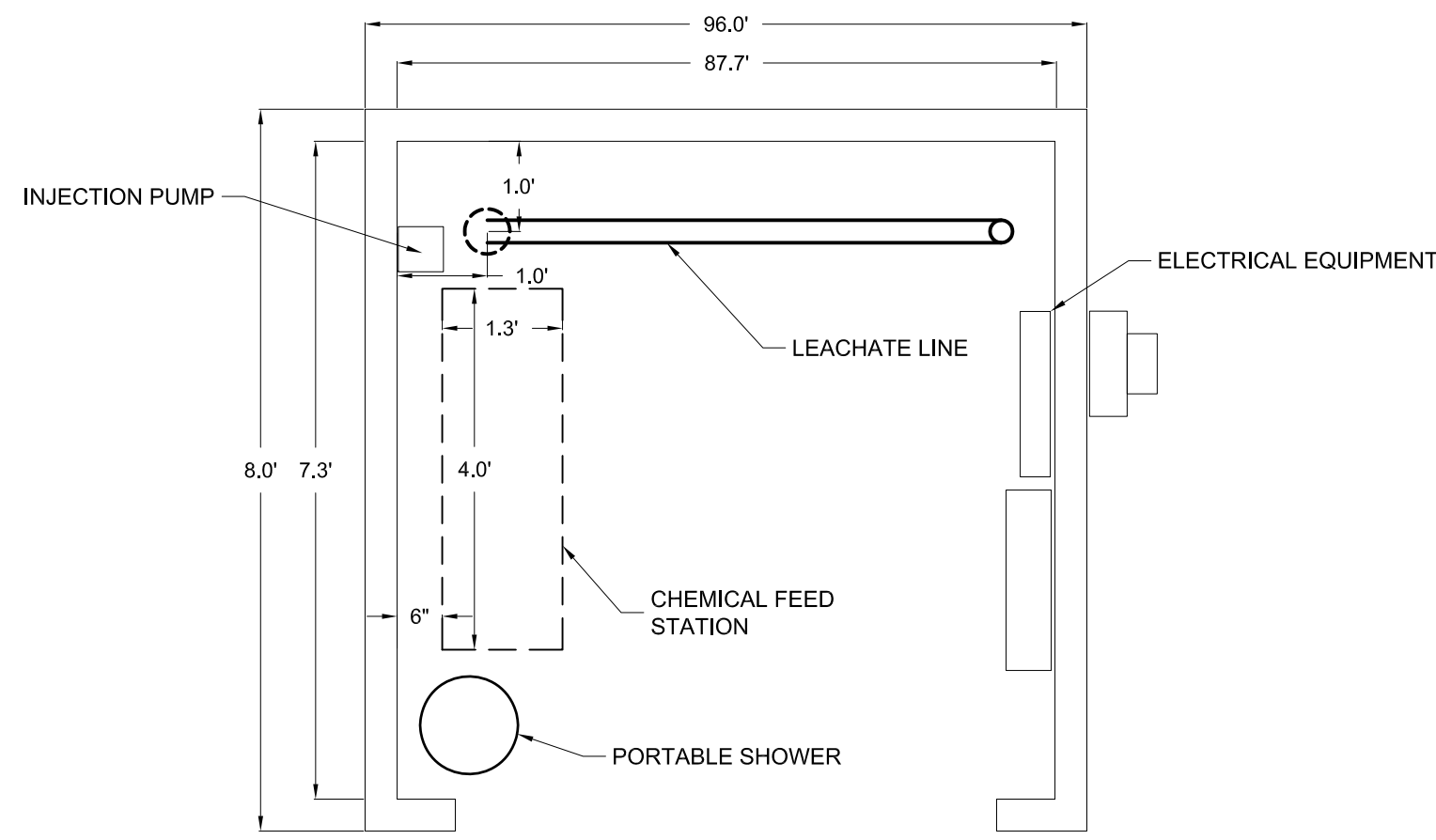
SEAL

DRAWN BY: WJM/AJZ
 DATE: JULY 2009
 CHECKED BY: THF
 APPROVED BY:

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY DISCLAIMS THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. THIS DRAWING IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

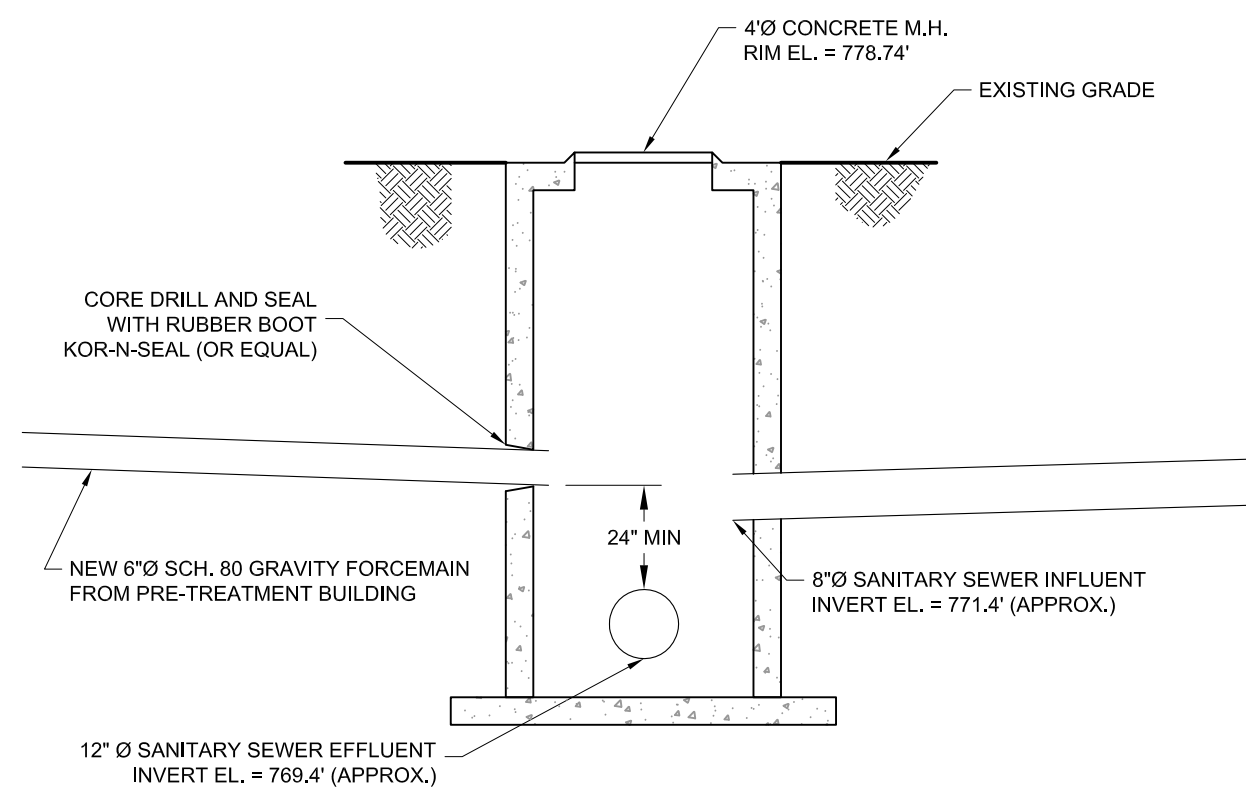
ELECTRICAL PROCESS LOGIC

REMEDIAL DESIGN-BUILD CONSTRUCTION PLANS
 GOWANDA, NEW YORK
 PREPARED FOR
 SITE RESPONDENTS



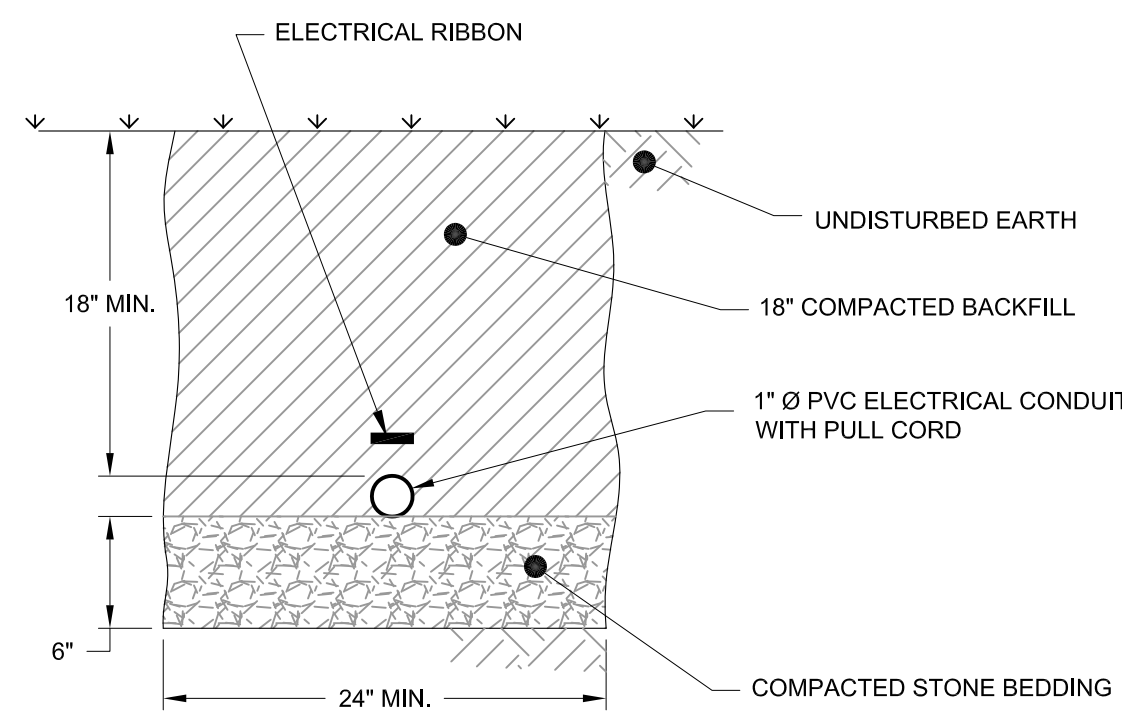
**TREATMENT BUILDING
PLAN & PROFILE**

SCALE = 1" = 2'



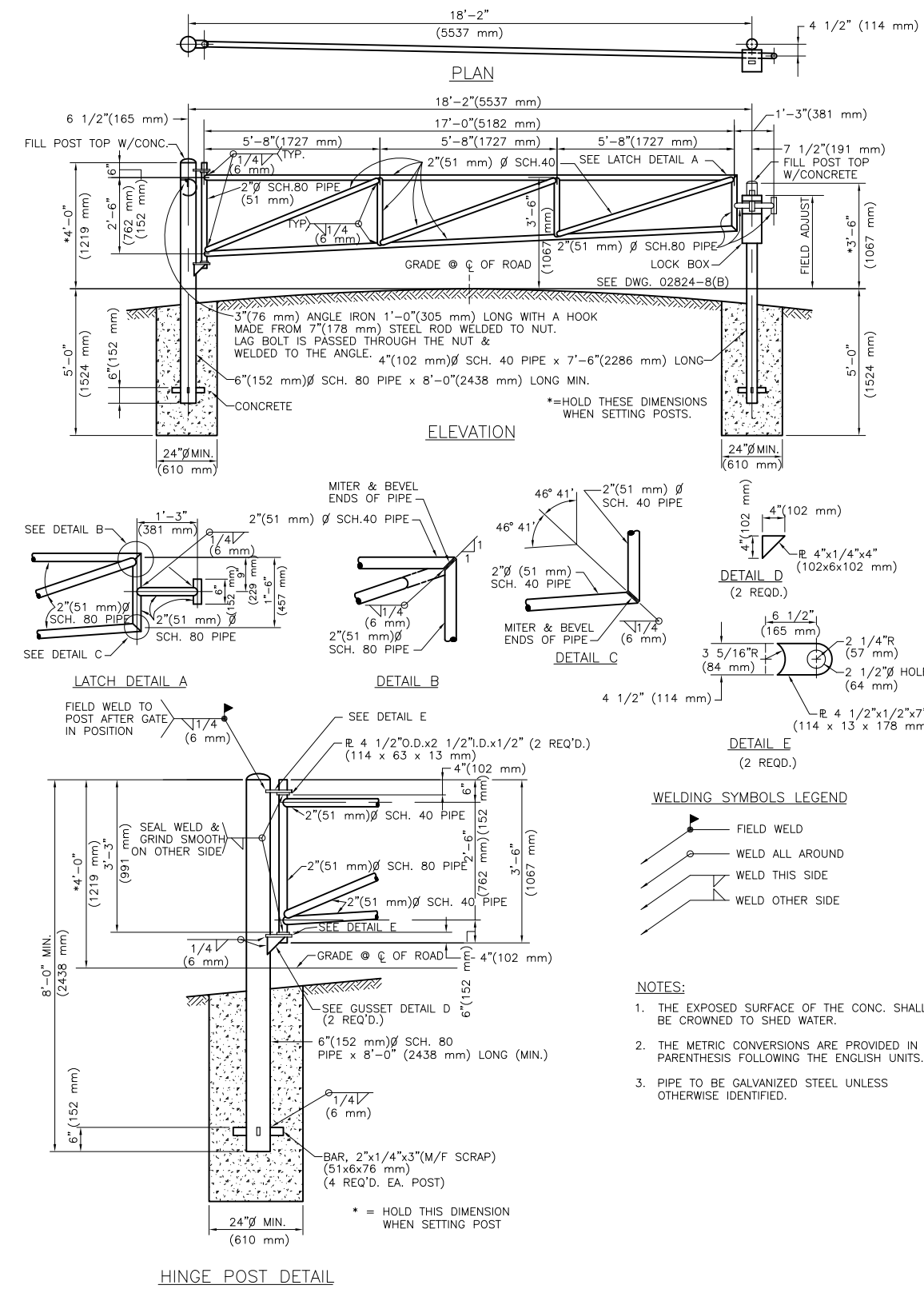
**SANITARY MANHOLE
CONNECTION DETAIL**

NTS



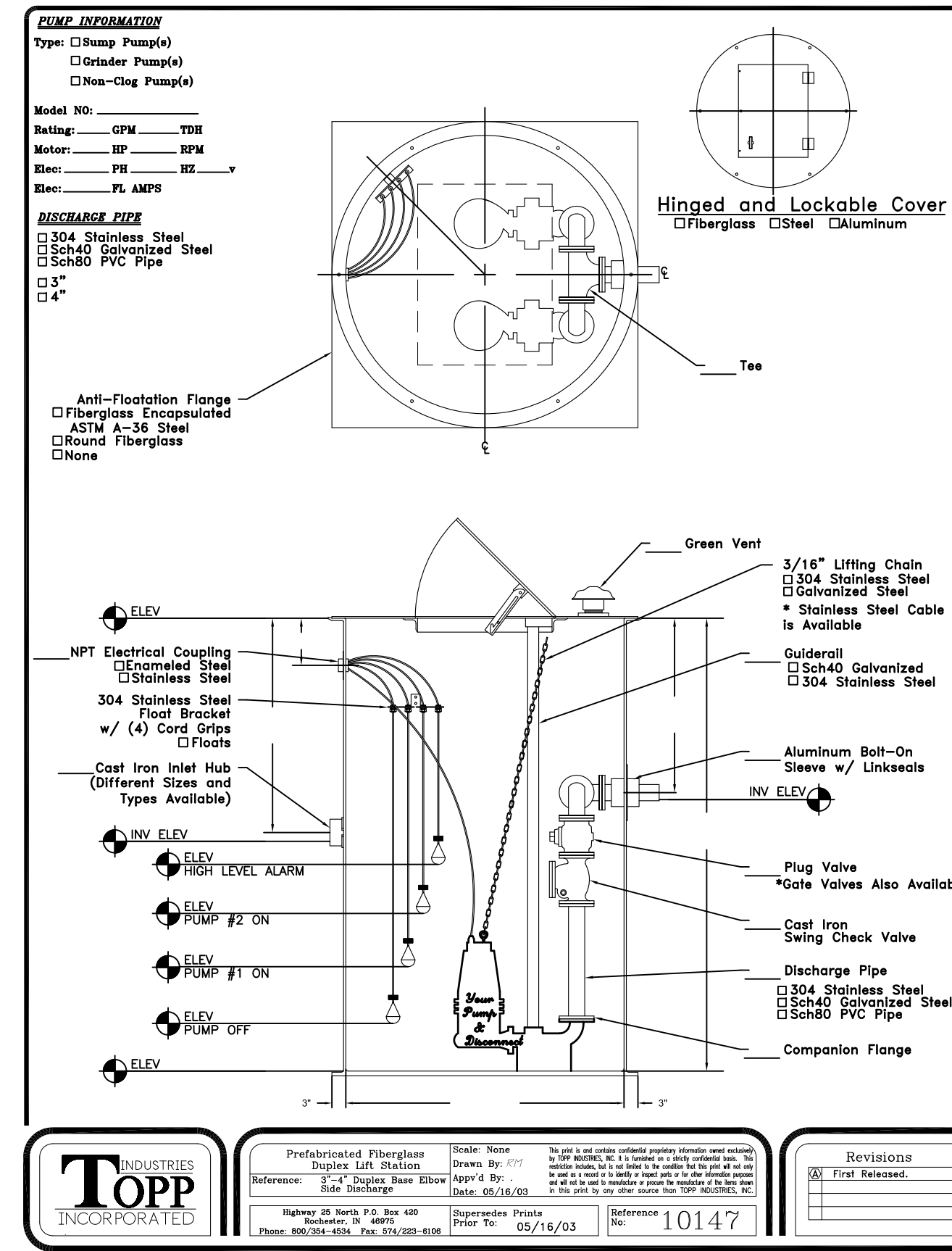
**ELECTRICAL CONDUIT
UTILITY TRENCH DETAIL**

NTS



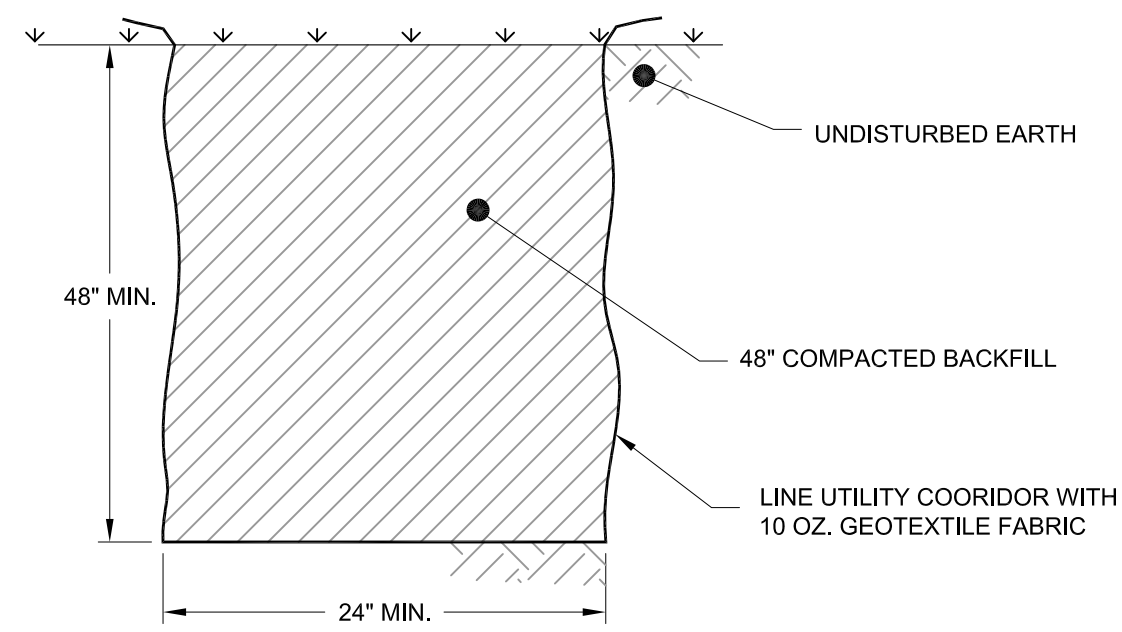
ACCESS ROADWAY GATE

NTS



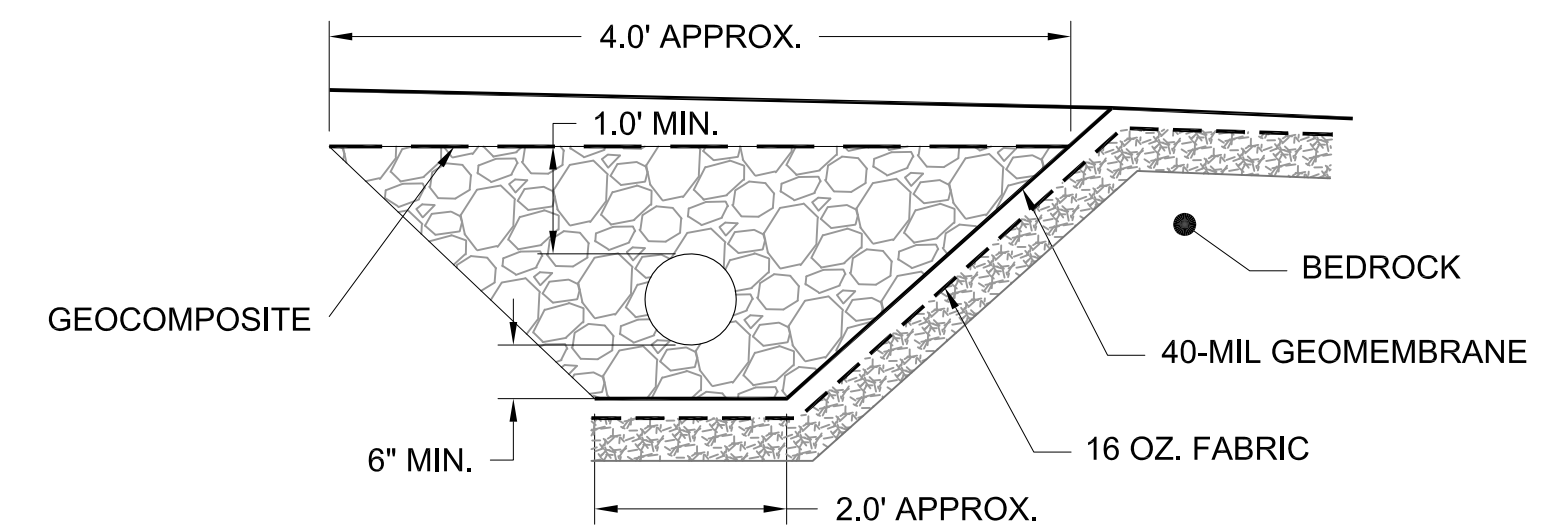
LIFT STATION DETAIL

NTS



**UTILITY CORRIDOR
TRENCH DETAIL**

NTS



**LEACHATE COLLECTION
TRENCH DETAIL**

NTS

REVISIONS	
NO.	DATE

NO.	BY	DATE	REMARKS

DRAWN BY: WJM/AJZ
DATE: JULY 2009
CHECKED BY: THF
APPROVED BY:

DISCLAIMER: BENCHMARK EES, PLLC, HEREBY CERTIFIES THAT THIS DRAWING IS A TRUE AND CORRECT REPRESENTATION OF THE WORK AS SHOWN AND DESCRIBED IN THE CONTRACT DOCUMENTS. THIS DRAWING IS SUBJECT TO RECALL AT ANY TIME BEING DISCLOSED OR REPRODUCED IN ANY FORM FOR THE SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK EES, PLLC.

DETAILS

REMEDIATION-BUILD CONSTRUCTION PLANS
GOWANDA, NEW YORK

PREPARED FOR
SITE RESPONDENTS